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THE  
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EDITED BY

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# THE AMERICAN PRACTITIONER.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### ON THE RESEARCHES OF CURRIE AND RECENT VIEWS RELATING TO THE REMEDIAL USE OF WATER.

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Hospital Medical College.*

The remedial use of water from the age of Hippocrates downward forms an interesting fragment of the past history of therapeutics, into which, however, I do not propose to enter. I propose in this essay to give an account of researches made at the close of the last century by a painstaking, able, and conscientious clinical observer, together with recent views relating to the use of water chiefly as an antipyretic measure in the treatment of febrile diseases, adding some testimony based on my own observations.

The use of water externally as a means of diminishing preternatural heat of the body has been studied of late particularly by German physicians. One of the ablest of these, Liebermeister, in his article on typhoid fever in Ziemssen's *Cyclopedia of the Practice of Medicine*, gives the credit of priority to Currie in these words: "The first result (the direct

cooling of the body by the energetic withdrawal of its heat) is accomplished by means of what is known as the cold-water treatment, which was first systematized and used in febrile affections, according to certain clear indications, by James Currie during the last decade of the eighteenth century. His method, which consisted chiefly in cold affusions frequently repeated, found many followers, and was especially employed in typhoid fever. But for some reason it gradually fell into disuse, and was finally almost forgotten.\* Liebermeister attributes the revival of the cold-water treatment, "with the proper degree of system and rigor," to E. Brandin Stettin, who published a work, entitled "The Hydrotherapy of Typhoid Fever," in 1861. He was followed by Jürgensen, who studied the cold-water treatment in the hospital at Kiel, and published a work in which "the results were set forth in an impartial and strictly scientific manner." The appearance of this work, quoting further Liebermeister's language, "marked an epoch in the history of the treatment of typhoid fever." Also, in addition to the article already referred to, Liebermeister has published an essay on the treatment of fevers, according to the use of cold water externally the first rank as an antipyretic measure.† The employment of this measure has by no means been restricted to typhoid fever and other essential fevers, but it has been extended to various acute and inflammatory affections. The cold-water treatment as employed in Germany has been resorted to already to some extent in France, Great Britain, and America. At this moment it holds a prominent place among the potential therapeutic agencies to which clinical inquirers in all countries are directing attention. It is safe to predict that the treatment will soon enter largely into the current medical practice. One tendency of the popular mind toward the potency of water as a remedy for the past twenty years or longer, dating from the rude empiricism of

\* American Translation, vol. i, 1874.

† *Sammlung Klinischer Vorträge*, No. 31. Leipzig, 1871.

Priessnitz, has in some measure prefaced the way for its regular and scientific employment. It has been obvious that the so-called "water-cures" and "hydropathic institutions," in which routine methods of treatment are employed, conducted often by ignorant men without discrimination, nevertheless do good together with much harm; in other words, beneficial results are obtained in a certain proportion of cases. Hence some establishments in which water is recognized as a prominent remedial agent are now under regular medical direction, and hydropathy may be said to have become in a certain sense legitimated. It is a curious fact that here, as with regard to another system of practice—namely, homeopathy—there is a seeming relationship between the bastard and the noble-born. There is, however, only the semblance of affiliation; the cold-water treatment as practiced by Brand, Jürgensen, Liebermeister, and others was no more a product of illegitimate hydropathy than was the practice of Priessnitz the offspring of the scientific researches of Currie.

The advocates of the cold-water treatment at the present time employ it purely for an antipyretic effect; the sole purpose is the withdrawal of heat from the body. Currie evidently did not regard its remedial use exclusively in this light; he considered the sudden and powerful impression produced upon the nervous system as especially important; hence the choice of affusion as the mode of its employment. According to recent views, fever—in other words, the preternatural heat of the body—is not merely an effect of morbid processes, but it is causative of functional disturbances, together with important changes in various organs, and it is eminently the source of danger to life. It is the heat of the body which kills, and therefore by the withdrawal of heat serious results may be forestalled and life saved. Under the name "parenchymatous degeneration" Liebermeister describes changes in the liver, kidneys, muscular tissues of the heart, vessels, blood, voluntary muscles, brain, and other parts of the nervous

system, salivary glands, pancreas, spleen, and the medulla of the bones, as direct effects of prolonged high temperature in fever, whether essential or symptomatic. This is quite in opposition to former views, which held that fever was a salutary reaction conducive to restorative actions. The study of the temperature of late years by means of the thermometer has led to fever being regarded as a secondary cause of disorder, lesion, and death. The value of this instrument in diagnosis, prognosis, and therapeutics is now so apparent that we can not but wonder at its being in our day a novelty in practice; yet, as will be seen presently, Currie did not overlook its value in connection with the remedial use of water.

In the antipyretic treatment by water the German authors who have been named employ usually the bath at a temperature of about 68° F., the duration of the bath averaging about ten minutes. They consider it indicated whenever the thermometer in the axilla shows a temperature of 102° F.; and it is to be repeated as often as the temperature, after having been reduced, again reaches that height. Following this rule, baths are sometimes repeated every two hours; and Liebermeister states that in some cases of fever the number of baths during the career of the disease has amounted to two hundred. In order to avoid the unpleasant impressions of cold, to which Currie seemed to attach especial importance, Ziemssen recommends that at the outset the bath should have a temperature of 95° F., and be gradually cooled by the addition of cold water. I do not go into further details, inasmuch as this method of treatment is fully described in works readily available, and in articles which have appeared in our medical journals.\* What are known as "cold packs" are considered to be a substitute for the baths for feeble patients and for children. Cold sponging of the body, even with ice-water, can never take the place of either baths or the packs. I shall

\* *Vide* article on the Antipyretic Treatment of Fever, by Leroy M. Yale, M. D., New York Medical Journal, November, 1874.

presently state a method of employing the "packs" which will, as I believe, render them in all cases quite as efficient as baths, with much less inconvenience to both patients and attendants.

The study of the antipyretic operation of the cold-water treatment manifestly involves the mechanism of the production of heat within the body in health and disease, together with the laws which regulate the uniformity of the normal temperature. Recent views relating to these topics possess interest and importance, but they do not come within the scope of this essay, and I shall now proceed to give an account of the clinical researches of Currie.\*

Currie's publications were by no means still-born; they were received with much consideration by his contemporaries. His method of practice was adopted to a considerable extent in Great Britain and in other countries, and there was abundant testimony in its behalf; yet after a few years it passed almost entirely out of medical practice. It was not altogether lost sight of. Trousseau, for example, in his *Clinique Médicale*, advocated it in cases of scarlet fever on the basis of his own large experience. Most authors on practice and therapeutics have referred to it, but generally as a measure which had become obsolete. I will venture to say that during the last half century very few have read his writings. I confess that I had not read them prior to a couple of years since, when from curiosity I obtained his book, entitled "Medical Reports on the effects of water, cold and warm, as a remedy in fever and other diseases, whether applied to the surface of the body or used internally."

This book (a duodecimo of four hundred and thirty pages) consists of two volumes in one, the second volume having been issued six years after the publication of the second

\* *Vide* monograph by Liebermeister in Volkmann's Collection, No. 19, entitled *Ueber Wärmeregulirung und Fieber*: also *Untersuchungen über den Fieberhaften Process und Seine Behandlung*, von Dr. H. Senator. Berlin, 1873.

edition of volume i. The first volume appeared in 1797, and the copy which came into my hands was a republication issued in Philadelphia in 1808. I read the book with great interest. I was greatly impressed with the value of the clinical observations which it contains. The book bears intrinsic evidence of the accuracy and good faith with which his researches were conducted and reported. The simplicity and candor which belongs to a truly philosophical mind, together with a spirit of philanthropy, pervade his writings. It is indeed a charming book, and ever since my perusal of it I have felt a desire to make it the subject of an essay for a twofold object; namely, first, to give an account of the author's researches, which, if we repudiate (as I think we should do) the doctrine that during the nineteenth century either diseases have radically changed or the human constitution has altered, are as valuable to-day as at the date of their publication; and second, to pay a tribute of respect to the memory of one whose labors entitle him to lasting honor.

Currie made no claim to having originated the method of treatment which he studied. He takes pains in the first paragraph of the first chapter of his work to attribute his determination to make trial of the treatment to an article, by Dr. William Wright, in the London Medical Journal for the year 1786, and he devotes the first chapter to the narration of Dr. Wright's personal experience of the treatment. From a desire apparently that Dr. Wright should have all the credit of priority, a biographical sketch is subsequently introduced. Following Dr. Wright's plan, Currie resorted to the treatment for the first time on the occasion of the prevalence of continued fever in the Liverpool Infirmary. The second chapter of the work is devoted to an account of this fever and the result of the treatment. The treatment was employed in seven cases, all of which ended in recovery. Quoting his language, "from this time forth I have constantly wished to employ the affusion of cold water in every case of the low contagious fever in

which the strength was not already much exhausted, and I have preserved a register of one hundred and fifty-three cases in which the cure was chiefly trusted to this remedy." . . . "Of late I have not thought it necessary to register all the cases in which this remedy has been employed. Having satisfied myself of its extraordinary efficacy, and of the precautions necessary in using it, I have found it the shorter method, as well as the more instructive, to record the instances in which it has proved unsuccessful. To detail the whole of my experience would be a tedious and useless labor." In chapter 3 he gives an account of a continued fever which prevailed in a regiment of troops in Liverpool. The epidemic "extended to fifty-eight persons in all, of whom thirty-two went through the regular course of the fever, and in twenty-six the disease seemed to be cut short by the cold affusion. Of the thirty-two cases two died. Both of these were men whose constitutions were weakened by the climate of the West Indies; both of them had been bled in the early stage of the fever; and one of them being on the twelfth and the other on the fourteenth day of the disease when I first visited them, neither of them was subjected to the cold affusion. The water employed on this occasion was taken up from the river Mersey, close by the fort. It was at that time of a temperature from 58° to 60° F., and it contains in solution from a thirty-second to a thirty-third part of sea-salt."

From this extract it is seen that of fifty-six cases in which the cold affusion was relied upon recovery took place in all, and in nearly one half of the cases the disease was apparently cut short. In chapter 5 he gives cases illustrative of the employment of the affusion of cold water in the different stages of typhus fever. A nurse in the fever-ward of the infirmary was subjected to affusion sixteen hours after the attack. Six hours afterward she was perfectly free from fever, and it did not return. In connection with the account of this case he says, "During the progress of fever when epidemic a great



number of cases similar to the above have occurred in which the disease was suddenly cut short by the use of the cold affusion on the first and second day." . . . "In each instance the result was so precisely similar to what occurred in the case I have related that it would be to no purpose to detail them. In cases in which the affusion was not employed till the third day of fever I have seen several instances of the same complete solution of the disease. I have even seen this take place when the remedy had been deferred till the fourth day, but this is not common." Three cases are then detailed, with the following conclusion: "Thus it appears that the cold affusion used on the third and fourth days of fever does not usually produce an immediate solution of the disease, but that it instantly abates it, and by a few repetitions brings it to a happy termination in two or three days." Three cases are next detailed to illustrate the result of affusion employed on the seventh or eighth day of the fever. The duration of the fever after the treatment was employed was in one case three days, in another case six days, and in the third case nine days.

Continuing to direct attention to those portions of the work which contain clinical facts or statements in relation to the use of cold water, in chapter 9 the author details an illustration of its successful employment in small-pox. Its employment in six or seven cases during the fever which precedes the eruption was followed by an instant abatement of the symptoms, however severe, "and the disease assumed a benignant form."

In chapter 13 the use of the cold bath in convulsive diseases is considered. Six cases of traumatic tetanus are given, and the author's conclusion is, "These cases afforded little inference either in favor of or against the use of the cold bath in tetanus arising from wounds." He states, "In the convulsions of children I have found the cold bath a most useful remedy, whether the disorder originates in teething or other



causes. I have seldom known it to fail in stopping the paroxysms, at least for some time, and thereby giving an opportunity of employing the means fitted to remove the particular irritation. I must, however, observe that in early infancy I have used it with caution, and generally by affusion, tempering the water when the weather was cold." He says, "In chorea sancti viti I have tried it frequently, but never found it of any service;" and he adds, "This is one of the few diseases in which electricity is of decided advantage." The following quotation relates to epilepsy: "I have used the cold bath during the paroxysm in various instances, but in general without the patient being roused to consciousness or sensation, and without advantage." Of hysteria he says, "In the hysteric paroxysm the cold bath, or indeed the plentiful affusion of cold water, is an infallible remedy." In connection with some general reflections on insanity the author gives an account of a case of furious paroxysmal mania brought on, as supposed, by excessive drinking. After the trial of opium, digitalis, Peruvian bark, emetics, and the tepid bath without success, the cold bath was resorted to. The following is the account of its employment: "Having in mind the success of the cold bath in convulsive diseases, I ordered it to be tried on the present occasion. The insanity returning with great violence on the 21st, he was thrown headlong into the cold bath. He came out calm and nearly rational, and this interval of reason continued for twenty-four hours. The same practice was directed to be repeated as often as the state of insanity recurred. On the morning of the 23d he was again thrown into the cold bath in the height of his fury as before. As he came out he was thrown in again, and this was repeated five different times, till he could not leave the bath without assistance. He became perfectly calm and rational in the bath, and so remained, being discharged some time afterward in perfect health of body and mind."

Before passing to analyze the second volume with reference

to the clinical experience which it contains, there are certain points connected with the use of water which claim attention.

Currie's observations were not limited to cold affusion. In the cases of convulsive affections, and in the case of insanity just referred to, he employed the cold bath. He employed also affusion of tepid water. With regard to the latter he found that the heat of the body was lowered in some cases more speedily by it than by the cold affusion. This statement, he says, "will appear paradoxical to those who reason respecting the heating and cooling of the living body in the same manner as respecting inanimate matter, but I assert it from actual observation." His explanation in part was the evaporation from the surface is greater after the tepid affusion; "but," he adds, "this is not all; the tepid affusion is little if at all stimulating, and does not, like the cold affusion, rouse the system to those actions by which heat is produced and the effects of external cold are resisted." Here is a foreshadowing of the point which is much dwelt upon by Liebermeister; namely, that an effect of the cold bath is to occasion an enormously increased production of heat within the body. In the recent views it is considered that, inasmuch as this increased production of heat represents a proportionate increase of the waste of the tissues, it may sometimes prove to be an evil result. Currie regarded the tepid affusion as "applicable to every case of fever in which the cold affusion is recommended, and those may receive much benefit from it whose fears or whose feebleness deter them from that energetic remedy." He states, however, that he has not found its effects so permanent as those of the cold affusions, and he has never seen it followed by the total cessation of fever. He considered it especially applicable to paroxysms of hectic fever. He used also the affusions of cool water; *i. e.*, of a temperature from  $87^{\circ}$  to  $75^{\circ}$ . Sponging or wetting the body with cold or warm vinegar or water he regarded as beneficial in an inferior degree to the cold or tepid affusion; and,

according to his experience, it is not only less effectual, but in many cases less safe; "for," quoting his words, "the system will often bear a sudden, a general, and a stimulating application of cold when it shrinks from a slow and successive application."

He preferred either sea-water or water to which salt is added, on account of the stimulating effect on the vessels of the skin; but he often used fresh water. The temperature of the water for the cold affusion was from 40° to 50° F. The method of employing it was to pour over the naked body a bucketful or from four to five gallons, the patient being immediately dried with towels and replaced in bed. The immediate effects were the reduction of the heat of the body frequently to the normal temperature, and a reduction of the pulse often from twenty to forty beats per minute, with relief of headache and other symptoms belonging to the febrile state. An abundant perspiration was common, followed by refreshing sleep. If the disease were cut short, of course the apyrexia was permanent; but if after several hours the heat of the body, the pulse, and other symptoms denoted a return of the fever, the affusion was repeated; and if not contra-indicated, the treatment was continued daily as long as the fever lasted. The exacerbation of fever usually being in the evening, this was considered to be the best time for the affusions. If the symptoms denoted much debility directly after the affusion, some warm wine was given. The formula laid down by Currie was that the cold affusion may at all times be safely used "when there is not sense of chilliness present, when the heat of the surface is steadily above what is natural, and when there is no general or profuse sensible perspiration."

I come now to a highly interesting fact connected with Currie's observations. He appreciated fully the importance of measuring the heat of the body with the thermometer. In the dedication of his volume to Sir Joseph Banks he says,

“About eighteen years ago, when I was at Edinburgh, it fell to my lot to write a paper on the influence of cold on the living body for one of the societies of students of which I was a member. In defending my speculations against some ingenious opponents a perpetual contradiction occurred as to facts, which a reference to original authorities did not enable me to remove; for I discovered that the accounts given of the temperature of the human body under disease, even by the most opposed authors, are, with a very few exceptions, founded not on any exact measurement of heat, but on the sensations of the patient himself or his attendants. Impressed with the belief that till more accurate information should be obtained respecting the actual temperature in different circumstances of health and disease no permanent theory of vital motion could be established, nor any certain progress made in the treatment of those diseases in which the temperature is diminished or increased, I have occasionally since that time observed and recorded such facts as related to the subject, intending one day or other to lay my observations before the public, if they acquired an importance that deserved attention. In the outset of this undertaking nothing seemed wanting but accurate thermometers and a moderate portion of time and attention, and I embraced in imagination the whole effects of temperature upon health and disease; a range of inquiry which experience has convinced me it would be temerity and folly to hope to go through.” With this appreciation of the importance of the thermometer in physiological and pathological investigations, had not his modesty led him to feel inadequate to the task, Currie might have rendered superfluous the recent labors of Wunderlich! In his observations on the remedial use of water, however, the thermometer was brought into requisition hardly less than at the present time. In proof of this statement I shall cite several extracts. Speaking of cold affusions, he says, “Neither ought to be used when the heat, measured by the thermometer, is less than or only

equal to the natural heat, though the patient should feel no degree of chilliness." Again, "In taking the heat of the patient I have generally used a small mercurial thermometer of great sensibility, with a movable scale, after a form invented by the late Mr. Hunter, and used by him in his experiments on the heat of animals; and I have introduced the bulb under the tongue with the lips close or under the axilla indifferently, having found by repeated experiments that the heat in these two places corresponds exactly, and gives a just indication of the heat of the surface of the body where sheltered by the necessary teguments from the contact of the external air. Finding, however, considerable risk in using the straight-tubed thermometer in contagious diseases, I got some instruments of this kind made with a small bulb and curved at the end. The bulb being introduced under the tongue or the axilla, the observer can stand behind the patient and mark the rise of the mercury without coming into the immediate sphere of his respiration. Though no injury was in any case incurred from the use of this thermometer, yet a farther improvement has suggested itself. By introducing a small piece of iron into the tube, after the manner of Mr. Six, a permanent indication of the greatest heat is obtained, and the approach of the observer toward the patient during the experiment is rendered unnecessary." Thus it is seen the curved axillary self-registering thermometer of the present day was anticipated by Currie. In his details of the symptoms in the cases which he gives the thermometric temperature before and after the cold affusion is always stated. After having reported in full a case of small-pox he apologizes as follows: "If this case be more detailed than seems necessary, let this be excused, as it is the first in which the actual heat in confluent small-pox has been recorded. It is here given accurately from the period when the disease came under my care."

I pass now to the second volume, and I find that with a due regard to the length of this essay I must restrict the

analysis to narrow limits, confining myself to facts and statements bearing directly on the remedial use of water. This volume opens with the following statement: "In the six years which have elapsed since the publication of the second edition of the first volume I have invariably employed the affusions of water, cold and tepid, in the diseases pointed out in the original publication, and I have extended it to some others of which I shall afterward speak. Its success has equaled my expectations. I have nothing to detract from the accounts I have formerly given of its efficacy. I repeat that, used in the three first days of fever, the cold affusion very generally stops the disease; that the same happy effect sometimes follows its use on the fourth or even fifth day, but seldom later; that even in the subsequent stages, when the heat continues preternaturally great and the skin dry, it is of manifest advantage, almost immediately relieving the most distressing symptoms, particularly restlessness and delirium, and conducting the disease to a safe and speedier issue. The tepid affusion is, as I formerly observed, applicable to all the diseases to which the cold affusion is applicable, and possesses very considerable though inferior efficacy. I find it, however, very safe, easy of application, and in a high degree grateful, and I have extended it to almost the whole class of febrile diseases. In my practice the cold and tepid affusions are very often combined in the same disease. While the heat is great, the skin dry, and the vascular action strong, I use water perfectly cold; when these symptoms diminish I use it cool; and as they subside still further I make it tepid."

The author proceeds to state that in 1801 he used affusions in continued fever with "less striking advantage than on former occasions," which he attributes to the disease having been of a graver type. He lost, however, but two out of twenty-three cases; a rate of mortality which would not in our day be considered as showing any want of success. He gives an account in detail of the two fatal cases. In these twenty-



three cases he used generally either the cool or tepid affusion. He details the additional fatal cases of fever in 1803, in which the treatment was relied upon. He then says, "I have thus related all the instances which have occurred to me since the last edition of this volume (a period of five years of extensive and attentive observation) in which the affusion of water on the surface of the body, cold or tepid, proved either less beneficial in its effects in fever than I had formerly represented it, or entirely unsuccessful. I would add, if any such had occurred, the instances in which the remedy had appeared to be injurious. But experience has suggested to me no instance of this kind; and, extensive as my employment of the affusion has been, I have never heard that it has suggested even to the fears or prejudices of others a single occasion of imputing injury to the remedy. If I were to detail in the same manner the evidence in its favor which has occurred to me during the same period of time, it would occupy many volumes. In the months of September and October, 1803, twenty cases of fever occurred in my private practice, in all of which the affusion of water was employed with success, having either cut short the disease or conducted the patient in safety through it. It is true in all these cases other remedies were used, for it would be unjustifiable for the sake of experiment to neglect any means of safety; yet these remedies were of the most simple kind—saline draughts, small doses of laudanum, and mineral acid drinks, with milk, gruel, and occasionally wine. In the use of all these remedies, and particularly of opium and wine, the strictest attention was paid to the heat of the patients, without which he who undertakes the treatment of fever seems to me to walk in darkness."

It is to be remarked that the cases of continued fever treated by Currie probably embraced examples of both typhus and typhoid fever, the distinctions which are now known to exist between these two fevers not having been then pointed

out. There is reason to think, moreover, that a disease which he describes as a fever differing from both the typhus and the synocha of Cullen may have been acute pneumonia.

As regards the phlegmasiæ and the hemorrhagiæ, he states that he was the less anxious to extend to them the use of the cold affusion, "because a remedy has lately presented itself that greatly enlarges our power over the numerous diseases which are arranged in these orders; I mean the digitalis purpurea." It is a curious coincidence that they to whom we are especially indebted for the recent views relating to the remedial use of water have also revived the employment of digitalis as an antipyretic remedy.

The second volume contains the author's experience of the cold affusion in scarlatina. His method of using it when a high temperature first appears is described in the following language: "The plan that I follow, if called in at this early period, is to strip the patient and dash four or five gallons of the coldest water to be procured over the naked body. This produces its usual cooling effects; but these are less permanent than in typhus. In one or two hours afterward the heat is often found as great as before; the affusion is therefore repeated again and again, as the obstinacy of the heat may indicate. It is sometimes necessary to use it ten or twelve times in twenty-four hours. At the end of this time, but commonly earlier, the force of the fever is broken, and a few tepid affusions at longer intervals are sufficient to subdue it entirely. During this time cold water and lemonade should be used as drinks, and the bowels opened, if necessary, by calomel. In a few cases I have thought it advisable to assist the affusion by the diaphoretic power of a solution of the tartrate of antimony. If left to myself, I use no other means."

The narrative of cases occurring in his own family is of so much interest that I can not forbear quoting it in full: "In the years 1798, 1799, and 1800 several cases of scarlatina occurred, in which I employed cold and tepid affusions,



according to the degree of heat and the stages of the disease, with very general success. I was fully prepared therefore for the treatment of the wide-spreading and fatal epidemic which broke out in the latter end of the summer of 1801. My family was at that time in the country, where it was seldom in my power to visit them. The scarlet fever had appeared among the children in their vicinity and carried off several. My two youngest children, who had not had the disease—both boys, one five and the other three years of age—had been in company with some of these children at play, and had been exposed to the contagion. I gave directions that they should be watched narrowly, and that I should have intimation of the first appearance of complaint. On the morning of the 15th of August a message was sent me that the eldest of the two had been restless and uneasy in the night, with feverish chills and pain in the head and back. I saw him in seven hours from the first of these chills. He was then becoming hot, and had vomited up his tea; his face and neck were beginning to flush, and it was evident that he was attacked by scarlatina. His younger brother had constantly slept in the same room with him. Though then walking about, he was evidently spiritless and languid, and there was little doubt that he had also caught the disease. In a little while the eldest boy became very hot, and the youngest sick and restless. He followed his brother, step by step, at the distance of about seven hours. The heat of the eldest soon raised the thermometer to  $106^{\circ}$ ,  $107^{\circ}$ , and  $108^{\circ}$ , and in both the symptoms prognosticated a violent disease. I had lost a girl of four years of age in scarlatina a few years before, though her first symptoms were far less violent. She perished in consequence of the ulcerations extending to the epiglottis and larynx and producing the symptoms of genuine croup. I shut myself up with these boys, and with plenty of pump-water and a pocket-thermometer prepared, not without anxiety, to combat this formidable disease. It would be tedious

and useless to go into details. As soon as the sensation of heat was steady in my eldest boy I stripped him naked, and poured four gallons of water over him of the temperature of 64° F. The usual good effects immediately appeared, but at the end of two hours he was as hot as ever. The remedy was again applied and repeated as the return of heat indicated. By the time the eldest was ready for his third affusion the youngest was ready for his first. The heat rose in the eldest to 109°, in the youngest to 108°, and the pulse in each was upward of 150. In thirty-two hours the first had the affusion fourteen times—eight times cold, twice cool, and four times tepid. Twelve affusions sufficed in the case of the youngest, of which seven were cold. The fever was in both completely subdued. On the morning of the third day they were both evidently safe; and on the morning of the fourth, though the pulse was still a little more frequent than natural, they were both convalescent. In this state they continued to sleep and rest. The scurf-skin peeled off them both, and each had a slight degree of swelling in the hands, but none of the other secondary symptoms.”

The general result of his treatment of scarlatina is thus stated: “This disease continued prevalent during the autumn of 1801, and throughout the succeeding winter and spring; and, though less frequent since, it may be said to have been constantly present in Liverpool, in a greater or less degree, up to the present time. In all the cases which I have seen during this period, amounting to upward of one hundred and fifty, I have uniformly followed the practice which I have just described, and with a degree of success so nearly invariable that I can not contemplate it without emotions of surprise as well as satisfaction.”

In the second volume of Currie's work is introduced much testimony of the success of the treatment in the hands of others. Communications were received from different parts of Great Britain, from practitioners in Minorca, Egypt, Persia,

India, St. Domingo, Abyssinia, and numerous other countries, including America. Officers of the British navy testified to the success of the treatment on shipboard. Volume I contains, in addition to the author's experience, chapters with the following captions: "General remarks on fever;" "An account of the remarkable effects of a shipwreck on the mariners;" "General view of the doctrines respecting fever;" "Animal heat;" "Is there an inhalation by the skin?" "Population of Liverpool and prevalence of fever among the poor." In the consideration of topics embraced under these captions experiments are introduced which at this day are of value in connection with physiological investigations.

I shall conclude my analytical review of the book by quoting the concluding sentences, to which the author affixed his initials in 1805. They breathe a philosophical spirit worthy of imitation by the writers of the present period. "Having had an apparently hazardous, but in my judgment a highly salutary, medical practice to recommend to the world—a practice contradictory to long-established and almost universal prejudices—I reflected beforehand with the utmost seriousness on the duty imposed on me to avoid in my manner of presenting it all possible grounds of offense. If my matter was alarming, if my object was bold, I have endeavored to make my manner calm and temperate. The claims of my contemporaries to merit on this occasion, so far as I was acquainted with them, I have studiously brought forward. I have been desirous of treating them not merely with justice but generosity; and many series of experiments which I myself have undertaken, and I may say undergone, especially in investigating the effects of perspiration on animal heat, I have suppressed in the detail and only given in the result. In a word, it has been my endeavor to suppress all personal considerations and all petulant expressions; where I could employ the authority of others, to do it freely and respectfully; and where I have been led by my subject to controvert

opinions before the world, to use the language of civility and candor. By these means I have endeavored to disarm personal opposition and to avoid controversy; controversy which some philosophers have invoked, but I think unwisely, and which on a science so imperfect, so important, and so difficult as that of medicine seems to me to have almost uniformly invoked consequences of an injurious and melancholy nature. On the whole my endeavors have been successful. I have encountered little opposition; I know not that I have provoked any man's enmity; while the medical writings of the day, both in Britain and America, bear evidence that considerable changes have been effected and are effecting on the opinions of medical men, quietly and insensibly, on points of no mean importance in physiology as well as in practice."

What are the points of similitude and contrast when the recent views are compared with those of Currie?

An object common to both is the reduction of the preternatural heat of the body. In the recent views this is the only immediate object, and the curative influence is attributed exclusively to the abstraction of heat. Currie held that an effect was produced, in addition to the withdrawal of heat, by a curative impression which he did not undertake to explain. He seems to have regarded the reduction of the heat of the body not so much as the means as the criterion of a curative influence. In both the same indications for the employment of water are recognized; in both there are the same efficiency and boldness in the treatment.

In the mode of employment there is a contrast, namely, between affusion and the bath. Currie evidently attributed to the affusion a much greater remedial efficiency than that belonging to the bath. The efficiency as an antipyretic which he attributed to tepid affusion is worthy of note, inasmuch as this is divested of the harshness which is an objection to the cold affusion.

In both the importance of the measurement of heat by the thermometer in determining the indication for and the effect of the treatment is alike appreciated, the fallacies incident to judging of the temperature by the touch or by the feelings of the patient being equally recognized in both.

Currie's researches did not extend to inflammatory affections, whereas in accordance with recent views the abstraction of heat is an object of treatment alike in symptomatic and in essential fever. Currie, however, was not opposed to the application of the treatment to acute inflammations; on the contrary, he was in favor of it, but he did not embrace this application in his researches.

Currie aimed to cut short fevers, and his success in this respect seems to have been remarkable. The treatment, according to recent views, has not so much reference to this object as to the diminution of the intensity of the disease and of danger. It is not claimed in behalf of the modern treatment that it generally or often cuts short febrile diseases. The contrast in this respect is striking, and suggests the inquiry whether it may not be true that the use of water by affusion has a potency as an abortive measure of treatment which does not belong to the bath. Finally, the use of the cold bath after the practice of Liebermeister and others of the German school at this day is as much at variance with—or, if the expression be admissible, in advance of—the usual treatment of the essential fevers and acute inflammations as was the employment of cold affusions in Currie's time. The cold-water treatment, according to the recent views, is essentially a revival of a therapeutical measure which was in vogue three quarters of a century ago, and which had become well-nigh obsolete; but, so far from detracting from its merits, this fact is perhaps evidence of its value.

What I have to say concerning the remedial use of water, based on my own observations, must be said in a few words. This will not be difficult, inasmuch as my experience of its

use is much more limited now than it probably will be some time hence, if life be spared.

The employment of the wet pack after the method formerly if not now practiced at certain hydropathic institutions of this country—namely, the naked body enveloped in a sheet saturated with cold water and then covered with blankets—is not reckoned as an antipyretic measure. The cold impression or shock is followed quickly by reaction, and usually by an abundant perspiration. A secondary effect, however, is often a diminution and sometimes even the complete disappearance of fever as denoted by the pulse, coolness of the surface, and other symptoms. In 1850 I resorted to this measure in a few cases (five) of continued fever early in the disease, in order to study its operation. At that time the thermometer had not come into medical use, and I can not refer to data showing measurements of temperature before, during, and after the employment of the measure. It were desirable to have such data. In the first of the few cases in which I resorted to the measure the speedy change in the condition of the patient was remarkable. Prior to the wet pack there was high febrile movement and delirium. He remained in the pack four hours. Copious diaphoresis followed; he passed a comfortable night, and on the morning of the next day he appeared to be completely free from fever. I was delighted with the apparent success of the treatment. In the afternoon I was summoned to see him, and found him in a state of coma. He died during the night following. I ascertained that after my morning visit he felt so well as to insist upon dressing himself and sitting up for a time. On returning to bed he became unconscious without any previous unfavorable change in the symptoms having been observed. The urine had not been examined, there was no autopsy, and so the sudden coma was not accounted for. It probably could not with propriety be attributed to the treatment; but owing to the unfortunate termination of the case I was deterred for some time from again resorting to it,



notwithstanding the immediate apparent effect was to render the fever abortive. Of the other cases the measure was in none followed by any unpleasant consequences. In one of these cases complete cessation of fever followed, and in all the symptoms denoted manifest improvement.\* I have resorted to this measure repeatedly in scarlet fever, and always with advantage, without, however, in any instance cutting short the disease. Other practitioners in this country have employed it and borne testimony to its value. I would especially refer to a paper, by Dr. R. W. Mathewson, advocating its use in scarlet fever, contained in the proceedings of the Connecticut Medical Society for 1864.

The wet pack for direct prolonged refrigeration is employed in a different manner. This did not enter into Currie's researches, but it is one of the methods of the modern antipyretic treatment with cold water. The naked body is enveloped in a sheet saturated with cold water, the patient remaining without any other covering until the desired amount of cooling is obtained. I have already alluded to a mode of rendering this measure not less potential than the cold bath. This is done by sprinkling the sheet, covering the body with cold water as fast as the water with which the sheet is saturated acquires warmth from the body. Another less efficient mode is to promote evaporation by producing a current of air over the body by means of a large fan or a pair of bellows. By the first of these modes I believe all the advantages of the cold bath, together with a measure of whatever additional advantage may belong to the cold affusion, may be obtained, with much less fatigue to the patient and inconvenience to the other souls.

I have had a considerable opportunity of observing this mode of refrigeration in cases of insolation or thermal fever. In 1872, having charge of all the medical wards in Bellevue

\* For a detailed account of these cases *vide* Clinical Reports on Continued Fever, by the author, published in 1852.

Hospital, in the months of July and August, an unusual number of cases of insolation having been received during that season, I gave the following directions: in all cases in which the axillary temperature was  $104^{\circ}$  or upward the patient to be enveloped in a sheet wet with cold water and placed on blankets covered with india-rubber cloth; cold water to be applied over the whole body from a sprinkling-pot at intervals of a few moments, and this to be kept up for a period of half an hour or much longer, according to the effect on the temperature, pulse, and other symptoms; this treatment to be repeated as often as the temperature again rises. These instructions were faithfully carried out, and the treatment has been employed in many if not most of the cases which have occurred during the two subsequent years. I believe I am warranted in saying that it has proved more successful than any other plan of treatment, and in some cases the apparent success was very striking. I have given in another place an abstract of a case which I will now quote. "A patient, admitted at two P. M., unconscious, pupils contracted, pulse 150, breathing stertorous, the axillary temperature  $110\frac{1}{2}^{\circ}$ , and the body cyanosed, was at once placed in the wet sheet and sprinkled. At half past four P. M. the temperature in the axilla had fallen to  $104\frac{3}{4}^{\circ}$ , the frequency of the pulse and the cyanosis persisting. He was taken out of the sheet, dry cups were applied to the chest, and at five P. M. the sheet was again applied and continued until fifteen minutes after seven P. M. The temperature was then  $101\frac{1}{8}^{\circ}$  and the pulse 120. At 9:45 P. M. the temperature fell to  $100\frac{3}{4}^{\circ}$ . About midnight he became conscious. Progressive improvement followed, ending in recovery. The only additional measures employed up to the restoration of consciousness were an enema containing castor-oil, with a few drops of croton-oil, and the hypodermic injection of ten minims of the tincture of digitalis."\* For the details of this treatment I would refer

\* Practice of Medicine, fourth edition, page 623.



to a report of fifty-five cases treated in Bellevue Hospital in July and August, 1872, prepared at my request by Dr. Ratzenbach, at that time house physician, published in the New York Medical<sup>7</sup>Journal in January, 1873.

In a paper read at a stated meeting of the New York Academy of Medicine, October, 23, 1873, on the antipyretic treatment of fever, Dr. L. M. Yale refers to a case in private practice in which this plan of treatment was pursued. I was associated with him in the management of that case, and it was one of much interest in connection with the measure under present consideration. The type of fever was remittent, the daily exacerbations characterized by a very high temperature ( $105^{\circ}$ ,  $106^{\circ}$ ,  $107^{\circ}$ , and toward the last  $109^{\circ}$  F.) Quinine in large doses failing to arrest the disease, the wet sheet was employed as in the treatment of insolation daily for a period of from ten to thirty minutes, and was always followed by a reduction of temperature, together with an amelioration of other symptoms. These short packs were repeated in a week thirty-five times. The case ended fatally, and an examination of the body revealed, so far as gross appearances are concerned, no lesions to account for death. I could not forbear the reflection that had the antipyretic treatment been pushed more vigorously—that is, the packs continued much longer—the patient's life might perhaps have been saved.

I have resorted to the wet sheet in the manner just described, in one case of acute articular rheumatism, with apparently marked benefit.

I have as yet had no experience of the cold-water treatment, except locally, in acute inflammations. I have made trial of the local application to the chest of cloths dipped in ice-water and renewed at short intervals, in some cases of pneumonia, as recommended by Niemeyer, but my experience is too limited to warrant any expression of opinion as to the merits of this method of treatment.

In conclusion I will offer a very few remarks on the use

of water internally as a remedial measure. Currie devoted a chapter of his first volume to "the internal use of cold water in fever." Although recommended by Hippocrates, Galen, Celsus, and others of the ancient physicians, lauded by some English writers in the early part of the eighteenth century as an almost universal remedy under the name *febrifugum magnum*, and in Spain and Italy, at the same period, having in a great measure, superseded medicine, the use of cold water in fever was opposed by Boerhaave and Van Swieten on the ground that, the course of fever being a lentor of the blood, warm drinks were more appropriate. As Currie says, "These learned theorists prevailed in their day over the voice of nature." Pringle, Cleghorn, and Lind, who wrote of fevers, had nothing to say in behalf of the internal use of cold water, and Cullen did not recommend it. "On the whole," Currie continues, "the use of cold drinks in fever is contrary to modern practice, and where it is occasionally given it is administered with caution, and rather permitted than enjoined." Popular belief, which here as in other instances was doubtless derived from the opinions of medical men, has within our day been adverse to cold drinks in febrile diseases. Within my professional recollection, to allow patients to drink cold water freely was considered dangerous in the extreme. The craving for it was met by warm liquids, and even these were given sparingly. This belief is not yet extinct, and it is not uncommon for medical men to enjoin a needless reserve in the use of cold drinks. Currie's work is open to criticism on this point. He advocates the free use of cold drinks from an examination of its effects, as he says, with the thermometer in his hand; but he thought it was to be forbidden whenever there was any sense of chilliness or profuse perspiration. He was needlessly cautious in these restrictions. He touched the true principle when he said that learned theorists prevailed over the voice of nature. It is evidence of need when the voice of nature calls. Thirst and the desire for cold drinks

express a want more reliable as a guide for treatment in disease than any doctrinal or theoretical opinions; and if the gratification of the want be followed by an agreeable sense of satisfaction, as a rule the ulterior effect will be good. A sufficiency of cold liquids in all febrile affections, the quantity regulated by the feelings of the patient and not by any abstract rules, belongs in the category with an abundance of pure air and an adequate amount of aliment. Air, food, drink—these form the tripod whence emanate hygienic laws for the management of fever, whether essential or symptomatic. I must content myself with these aphoristic assertions without discussing either the *modus operandi* of cold as thus employed or the *rationale* of the usefulness of the ingestion of liquid.

The internal use of water as a remedial measure, irrespective of the action of cold, in various affections is a topic on which, if time permitted, I should be glad to enlarge. I am satisfied that this is a topic deserving more consideration than it has as yet received from our profession. A source of more or less benefit, derived often from the so-called mineral springs and artificial waters, seems to me to have been overlooked; namely, the usefulness of simple water ingested in considerable or large quantity. Undoubtedly much of the benefit which is received by those who drink mineral waters at the watering-places is attributable to change of scene, relaxation, the expectation of improved health, freedom from business and other cares, together with sanitary advantages pertaining to climate, regimen, and diet. But aside from these it is fair to attribute something, and perhaps not a little, to the drinking of the waters. It is evidence of this that mineral waters brought from the springs and those artificially prepared are often beneficial to those who remain at home. That the benefit may be due, measurably or chiefly, to the water and not to medicinal constituents is shown by the fact that some waters supposed to possess extraordinary remedial potency have no medicinal constituents. The Missisquoi water, a few years

since famous for the cure of cancerous and other affections, was analyzed by Squibb, and found to be only remarkably pure water. In not a few of the waters which have acquired a popular repute the saline ingredients are either without effect or their effect must be insignificant; pure water substituted would do quite as well, if not better. If this be so, it is well to consider if medical practice might not with advantage avail itself more than is now done of the remedial agency of the internal use of water. And in connection with this topic the importance of the purity of water suggests itself, to which I allude merely to raise the inquiry whether the introduction of distilled water for drinking and culinary purposes might not be a wise measure in both a sanitary and a therapeutical point of view. In this essay I can do no more than to raise the inquiry.

In cases of renal disease, when an object of treatment is to promote the secretion of urine, water used internally may sometimes prove a truly potential remedy. I shall close this essay with an account of a remarkable case which seemed to substantiate this opinion.

A young woman was confined in Bellevue Hospital in May, 1873. Metritis followed the confinement, and when recovering from this affection, after an exposure to cold, acute tubal nephritis occurred. The urine was greatly albuminous and bloody, vomiting was a prominent symptom, her vision was affected, she became delirious, and had a long and violent convulsion. She was purged with elaterium, the hot-air bath was employed, and morphia injected hypodermically. These measures arrested the immediate danger from uræmia. The vomiting, however, persisted, and the irritability of the stomach became so great that medicine could not be administered by the mouth. The urine was quite scanty (twenty-four ounces in the twenty-four hours); it was bloody, and the specific gravity was 1002. She suffered much from headache, and a return of the convulsions was hourly expected. Under these

circumstances Dr. Jas. L. Perry, of this city, then one of the house physicians of Bellevue Hospital, originated and superintended the following plan of treatment: water and milk were given alternately in a very small quantity at a time, and repeated at intervals of a few moments, a definite amount (four ounces) being given every hour. In twenty-four hours the quantity of urine was increased to sixty-four ounces, the next day the quantity was seventy-four ounces, and the next day one hundred ounces. On the second day the specific gravity was 1003, on the third day 1006, on the fourth day 1008, and in a few days 1010. The blood at once disappeared, and in a few days there was no albumen. With these favorable changes in the urine there was improvement in all the symptoms. After a few days the stomach tolerated solid food, and she was able to take tonic remedies. In three weeks she was free from any evidence of renal disease; the urine was normal in quantity and specific gravity; she suffered only from anæmia and debility; and she was subsequently discharged well.

This account is not given from recollection; it is a synopsis of the history recorded fully and furnished by Dr. Perry. The facts of the case seem to warrant the belief that the patient's life may have been saved by so simple a measure as the internal use of water.

NEW YORK.

## A RARE CAUSE OF ANAL FISTULA.

BY T. J. HOPPEL, M. D.

On November 23, 1873, together with Dr. Shackelford, I saw Mr. W., of this place, aged sixty-eight years. We found the whole perinæum of a dusky-red hue, doughy feel, and fluctuating in one or two places. An incision was made on

each side of the raphé, followed by a discharge of ichorous pus. Ordered warm fomentations and poultices, predicting that an anal fistula would be the result. We saw nothing more of the case till January 13, 1874, when an examination revealed two fistulæ, one on either side of the raphé, half way between the anus and scrotum. On the right side the probe passed anteriorly about two inches along the scrotum, and posteriorly to the right side of the anus. The patient, being unwilling to take chloroform, was operated on without it by the knife. The grooved director met with some resistance when carried up on the right side, imparting the feel as of a gritty, hard substance, the outlines of which seemed to be conical, with quite a large base. The sinuses being freely incised and the hemorrhage very slight, the parts were packed with oakum, and a course of tonics ordered.

Two days after the patient was sitting up, free from fever. A very small quantity of thin pus is discharging from the scrotal extremity of the track. In the apex of the sinus along the rectum is the same rough, gritty feel to the probe. The oakum is to be packed in night and morning.

January 18th—Patient walking about the house. I now found with the probe and removed a bone about an inch and a half in length and two lines or less in diameter, one end resting in the rectum. This end presented an articular surface; the other was rough, jagged, and pointed, as if it had been broken obliquely; but I was unable to make out to what animal it belonged.

January 23d—The incision is much more healthy, and suppurating through its whole extent. The track along the rectum is filling rapidly. Directed quinine, and dismissed the patient as cured early in February. Some months after all signs of the fistula, except the cicatrices, had disappeared.



## RELAXATION OF THE PELVIC SYMPHYSES.

BY LEVIN J. WOOLLEN, M. D.

Mrs. T., aged nineteen years, of nervo-sanguine temperament, and of plethoric habit, was confined ten months after marriage. She was threatened with abortion about the sixth month, but under treatment passed the crisis and went to full term. Three weeks before confinement she was tormented with pruritus of the vulva, which was relieved somewhat by a local application of a mixture of glycerine, carbolic acid, and fluid extract of belladonna. There were considerable puffiness and œdema of the external organs of generation, and the pruritus at times was so severe as to nearly distract her. About the seventh month there was considerable swelling of the lower extremities and at times severe headache. I suspected the existence of albuminuria, but examination of the urine proved no albumen present. Under treatment the extremities resumed their normal condition before labor commenced. The labor was painful, somewhat protracted, and called for chloroform for several hours before its completion. The head descended into the pelvic excavation without difficulty, but at the lower strait it was arrested for several hours, which, together with the unsatisfactory condition of the patient, so enfeebled the child that it died eighteen hours after birth. Its death so affected the mother as to render her condition for a few hours quite alarming.

About the fourteenth day after confinement the patient asked if she could leave her bed and sit up. I found her complaining of pain in the lower part of the abdomen and along the spine, with numbness of the lower extremities. Pressure over the symphysis pubis caused pain; and yet such pressure, when she got upon her feet and attempted to walk, was necessary to enable her to move her limb. Locomotion



was extremely painful, and when she stood upon one foot the body was greatly bent toward that side. I readily concluded that my patient was suffering from relaxation of the symphysis pubis, and directed her to wear a bandage tightly pinned around her hips. In a few days I ascertained that the bandage was of but little benefit, and that she could walk no better than before. I found the bandage was not properly applied, being only about four or five inches in breadth. I directed a bandage wide enough to reach from one inch above the crest of the ilium to an inch or two below the trochanters, and to pin it tightly, especially at the upper margin; also two perineal bands to pass from the back part of the bandage on each side, down between the limbs, and to be pinned in front near the crest of the ilium. After this my patient suffered little inconvenience and made a rapid recovery.

Relaxation of the symphyses often passes unrecognized by the physician. In many cases the patient is supposed to suffer from a slight form of metritis. It may also be mistaken for irritation of the spinal cord.

With regard to the causes of relaxation of the symphyses physicians are not agreed. Some think that it is prone to occur in women with small pelves who give birth to large children; others say that it is usually met with in persons who have roomy pelves. In my own case the pelvis, though large, was contracted at its inferior strait, and I suspect that this condition quite often obtains. Barker speaks of serous infiltration as producing relaxation and softening of the articular cartilages. In my case there was inveterate pruritus with serous effusion in those parts visible to the eye. I therefore conclude that the leading causes are, first, the effects of the serous effusion, softening and weakness of the articular cartilages; and second, pressure caused by the child's head, which, having passed almost unobstructedly into the pelvic excavation, and meeting with great resistance at the inferior strait, causes the symphyses to separate. Relaxation may occur

either at the sacro-iliac or pubic symphyses. I believe, however, that the pubic symphysis is most frequently the seat of the affection.

With regard to the diagnosis, the patient's inability to stand on both feet, while the weight of the body can be borne for a short time by one limb—the body being bent toward that side—is perhaps pathognomonic. Great stress is laid upon the necessity of having the patient assume the recumbent posture; then by placing one hand upon the symphysis pubis, and with the other seizing the limb and flexing and extending it, the bone will be felt to move at the symphysis. "To investigate the sacro-iliac joint, seize the *cristæ ilii* with both hands, and get the patient to walk, either with or without help. At each step the ilium of the affected side is felt to be shoved upward, while that of the other side stands considerably lower." Trousseau attaches some importance to the absence of numbness of the limbs as excluding disease of the spinal cord. In the case now reported there was marked numbness of the lower limbs, but no other evidence of spinal disease. Trousseau says, "In consequence of the existence of the puerperal state inflammation may complicate post-partum loosening of the pelvic symphyses, and lead to death." He then details two cases where suppurative inflammation attacked the symphyses, in both of which the hips became œdematous, and fluctuation being detected the matter was evacuated with a bistoury. One case was lost sight of, the other ended in death. Barker mentions several cases where suppuration occurred at the affected joint, and abscesses at various points. "The diagnosis is not difficult. In distinguishing between it and simple relaxation it should be borne in mind that, in consequence of the inflamed condition of the symphyses, the difficulty of walking stands in direct relation to the intensity of the pains, and that in general the patient has more control over the lower limbs in consequence of the bones being still held in place by the inflamed cartilages, and

especially does this hold good when the inflammation is confined to one symphysis. The vaginal touch, the imposition of the hand upon the affected parts during movement of the patient, and the probe after evacuation of abscesses will be found sufficient to establish a diagnosis."

The treatment of the simple form of relaxation of the pelvic symphyses consists in the proper application of a hip-bandage. In applying the bandage care should be taken to have it broad enough to reach a little above the crest of the ilium. This will serve, if the bandage is tightly fastened, to *fix* the bandage at its upper border; then the lower edge should embrace the trochanters. Two perineal bands should be used, each one passing over the groin in front and at a corresponding point behind. Sometimes the surface of the body embraced by the bandage will be excessively tender at certain points, so that the bandage can not be tightened with comfort. This was the case with my patient, and I remedied the trouble by interposing cotton-batting between the bandage and the body. After properly applying the bandage it is not necessary that the patient should remain in bed; indeed Dr. Barker believes that the recovery is expedited by the patient taking a moderate amount of exercise.

VEVAY, IND.

## Reviews.

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**Therapeutics and Materia Medica.** A Systematic Treatise on the Action and Uses of Medicinal Agents, including their Description and History. By ALFRED STILLÉ, M. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; Physician to St. Joseph's Hospital, etc. Philadelphia: Henry C. Lea. 1874.

This is the fourth edition of this learned treatise, which has been so much enlarged and so thoroughly revised that it has claims to be considered a new work. The former editions were received by the profession with so much favor that there can be no doubt as to the success of this. As it is now presented to its readers, the treatise, in its two ample volumes of nearly a thousand pages each, constitutes a treasury of knowledge relating to drugs and their application to disease which in the present state of medical science it would not be easy profitably to enlarge. All that the student could wish to learn of materia medica is related, and the discussion of therapeutics is full and able. We are glad to have the opportunity at the beginning of a new year of bringing before our readers a work which we can so heartily indorse as every way worthy of their patronage. We point to it with pride as a work which in research, in learning, in sound judgment, and the scholarly grace of its style will compare favorably with any similar treatise in any language.

In his introduction Dr. Stillé, among other interesting topics, discusses the sources of knowledge and the limits of power in therapeutics; the sources of knowledge respecting the action of medicines, their physiological action, absorption,

the curative action of medicines, the influences modifying their effects, and the art of prescribing. Under the head of absorption he states some facts which will be new to many readers. It is the general belief that medicines administered by the rectum must be used in much larger doses than when given by the mouth. Some writers teach that it must be two or three times, and others even five times larger; but from investigations made by Savory it appears that the absorbing powers of the stomach hardly exceed those of the rectum, and that consequently there is risk in the administration of such doses, especially of narcotic medicines. Strychnine acts even more energetically through the rectum than by the stomach, and most physicians who have prescribed enemata of laudanum must have been struck with the promptness and energy with which the opiate acted. It would doubtless be good practice to employ medicines oftener than we do by the rectum, but the facts cited by Dr. Stillé suggest a cautious use of powerful medicines in the form of enemata.

The hypodermic method of introducing medicines, it is claimed, has the advantage over all others of being more prompt and certain; but this has been disputed. Quinine, at least, thus employed has been found to be as long as thirty-five minutes producing its effects in some cases, while in the rectum it is absorbed in from ten to forty-five minutes. So that as to promptness and activity the difference between the areolar tissue and the rectum, as remarked by Dr. Stephen Rogers in the *New York Medical Journal*, is practically nothing; and, considering the fatal results which have sometimes attended hypodermic injections, we are glad to observe a subsidence of the rage for them which a few years ago had possession of the professional mind. Great numbers of practitioners have given up the operation and laid aside their syringes. They see, as Dr. Rogers remarks, "that disease can be treated quite as successfully, and at less risk of doing irreparable harm, without it, though they have occasion to

deplore the loss of the *éclat* which the flourish of instruments and the production of pain were wont to bring them."

The prominent feature of Dr. Stillé's great work is sound, good sense. It is learned, but its learning is of inferior value compared with the discriminating judgment which is shown by its author in the discussion of his subjects, and which renders it a trustworthy guide in the sick-room. The art of prescribing is mentioned in it, but no attempt is made to reduce such knowledge to written rules. He is the successful practitioner who possesses diagnostic skill and is furnished with an ample supply of prescriptions, and at the same time has the tact to apply the appropriate means not only to the "permanent morbid element," but to "every subordinate derangement," and thus influence every function in a way "to concur in the prime object of bringing the disease to a safe termination." But this is a knowledge hardly to be acquired from books. As remarked by Dr. Stillé, "It is the result in most cases of long practice by a man whom nature has fitted for its attainment. Few physicians are so highly endowed. It can only be communicated to pupils by a skillful teacher in daily or still more frequent visits at the bedside of the sick."

This treatise, if it has not already taken the place of Pereira's learned volumes on *materia medica*, must ultimately supersede that elaborate work, as having all its learning, and being at the same time more practical and more fully up with the therapeutics of the day. It constitutes a sort of encyclopedia on the subject, and is issued in a style as to paper and binding suitable for a book likely to be so constantly referred to.

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**The Sphygmograph:** Its Physiological and Pathological Indications. By EDGAR A. HOLDEN, A. M., M. D. Philadelphia: Lindsay & Blakiston. 1874.

Dr. Holden won with the essay bearing the above title the "Stephens Triennial Prize" for April, 1873, and now, with

some slight modifications, reproduces it in neat book-form, profusely illustrated. The preparation of the work evidently cost its author much time and labor, and it certainly well deserved a prize; but after giving it a careful reading we reluctantly confess to being unable to discover wherein it has either advanced our knowledge of the arterial circulation or simplified its study. The sphygmograph which Dr. Holden has invented is not only not a superior instrument to Marey's as it is now sold, but in our judgment is much inferior to it. The tracings with such an instrument must from its very construction, it seems to us, lack that distinctness and uniformity which are so essential in estimating the value of the pulse-waves. In proof of this we need but refer to the hundreds of tracings given by our author, taken by his instrument, in nearly every one of which the defects we have mentioned are but too manifest.

The teachings of the sphygmograph, whether interpreted by Dr. Sanderson or Dr. Holden, have not thus far, we think, been all that could be desired; and unless some one will construct an instrument far handier, simpler, and less expensive than those now in the market, and simplify the study of the subject as well, we predict that pulse-writing will not soon come into general use among practitioners.

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**A Conspectus of the Medical Sciences:** Comprising Manuals of Anatomy, Physiology, Chemistry, Materia Medica, Practice of Medicine, Surgery, and Obstetrics. For the use of Students. By HENRY HARTSHORNE, A. M., M. D., Professor of Hygiene in the University of Pennsylvania, etc. Philadelphia: Henry C. Lea. 1874.

The title of the above work sufficiently indicates its scope and purpose. As a conspectus it is clearly the best now within reach of the student, and under the present system



of medical lectures it really would seem to be a necessity to him.

There are those, we are aware, who deny the use of such works, and even sneer at persons who may honestly say a kindly word of them. *The conspectus and the compend are a natural outgrowth of the present American system of medical education.* Until this is changed the average student will be forced to resort to some extra means to keep up in his classes, and none so easy as that afforded by the kind of work under consideration. He will naturally avail himself of it, and the sale of the conspectus will still continue. There seems to us but one way out of the evil, and that is through a total change in the present plan of medical teaching. The schools must allign themselves with Harvard, and resolutely imitate her example. Then, and not till then, will the voice of the conspectus cease to be heard in the land; and the student no longer needing it, the occupation of its maker will be gone. The course pursued in Harvard, and that course alone, leads away from this class of works and tends to make its men thorough. The course in the other schools drives the student straight into the embrace of the conspectus, and, unless he be uncommonly strong, tends to make him a smatterer.

Of this particular conspectus we can truly say it is a complete review of "the indispensable elements of a course of medical study as taught in the colleges," brought very fully down to the present time. The name of its publisher is a sufficient guaranty of the excellence of its make-up.

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**The Drift of Medical Philosophy.** An Essay by D. A. GORTON, M. D. Philadelphia: J. B. Lippincott & Co. 1875.

We had occasion some time ago to notice a little work by Dr. Gorton on Mental Hygiene, and to advert to its singular mixture of truth and error. This essay is characterized by

the same merits and defects. It contains much truth, but is disfigured by an amount of absurdity which would weigh down a much larger and more substantial volume. The author sets out with the unquestioned truth that mental obliquities are due to bad organization, and concludes by recommending *sulphur* as a cure for obstinate contumacy. He would treat all perversities of temper by drugs. Arsenic he has found a remedy for drunkenness, and *nux vomica* for maliciousness. With *'sepia* he cures licentiousness, and with *stramonium* cowardice! We wonder if Dr. Gorton did not rush into the streets crying *curcka* when he made these wonderful discoveries? How they will increase practice when they come to be generally recognized! The doctor will then be sent for to treat peevish children, as well as hysterical mothers and drunken fathers. Men of timid dispositions will go to him instead of the bottle for artificial courage, and those who are "burdened with piety" will seek relief in *pulsatilla*!

But as in some sort an offset to this stuff Dr. Gorton, who is a homeopathist, lets in some light upon the follies of his system, and announces that his brethren are split up into warring factions. The grains of truth on this subject scattered over the concluding pages alone render this essay worthy of notice. The author has the sense to perceive and the candor to admit that the drift of medical philosophy is not to the system of infinitesimals and *similia a similibus*. It may be that his admissions on this point and his account of the ridiculous blunders of his brother homeopathists will atone with the reader in some degree for the nonsense running through the greater part of the essay.

## Clinic of the Month.

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ON THE TREATMENT OF DIPHTHERIA.—Having recently received from subscribers letters asking “what is the best treatment for diphtheria?” we surrender much of the space devoted to *Clinic* to extracts from the article on “Diphtheria,” by Dr. Oertel, in Ziemssen’s Cyclopedia, a work noticed at length in our last issue. It may here be remarked that Dr. O. is perhaps the highest living authority on this subject.

“*General Treatment.*—The treatment of diphtheria by internal remedies is based upon the same principles as those which guide the administration of internal remedies in other infectious diseases. As we possess no remedies which act directly to destroy or restrain the disease, or the virulent poison which causes it, we resort only at the present time to those agents which meet the existing indications.

“For this purpose therefore cooling and antifebrile remedies should be chiefly given during the commencement of the sickness; these are, for instance, the mineral acids, dilute hydrochloric and phosphoric acids, and solutions of the sulphate or the muriate of quinine in doses proportioned to the age of the patient and the vigor of the symptoms. If gastric symptoms usher in the disease, we can best quiet these by the administration of remedies containing carbonic-acid gas, such as the effervescing draughts and various mineral waters. Where exhausting diarrhea exists we must combat it energetically at once, employing for this purpose, according to the intensity of the trouble, oily and mucilaginous substances in combination with varying doses of opium, or solutions of tannin, alum, nitrate of silver, etc. If on the second or third

day the fever diminishes, and all complications have been successfully brought under control, our best plan is to wait, and not to resume active interference until new and then generally alarming symptoms develop.

“In some cases already on the third or fourth day an alarming diminution of the patient’s strength is observed; under these circumstances we must give the preference to excitant remedies. When the pulse becomes frequent and lacking in force, and the heart-sounds are feeble and indistinct, we may resort to the use of quinine in large doses (from eight to fifteen grains); and should this succeed in strengthening the heart’s action—which, alas! is very rarely the case—we may then change to other tonic remedies. Still even quinine may be continued for some time with advantage as a tonic, if administered in small doses of from three to four and a half grains in the course of the day. The stronger wines and nourishing diet, in the form of concentrated meat-broths, soups to which the yolks of eggs have been added, tea, and coffee, will also be found indispensable adjuncts. If under this treatment the patient does not recuperate, we may expect soon to see a still further depression of the vital forces, with indications of a pronounced sepsis, and symptoms of a fatal termination. At this point we may employ without hesitation large doses of the strongest irritants, as, for instance, sulphuric ether, Bestuscheff’s tincture of iron,\* and cognac, combined with the stronger wines, in the hope of exciting the feeble and irregularly-acting heart to energetic contraction. In adults sulphuric ether or Bestuscheff’s tincture should not be given in smaller doses than ten drops every hour, if we expect to obtain the desired effect; and where collapse has begun to show itself the same dose, or even a larger one (from twelve to fifteen drops), should be given every half hour not only during the day, but through-

\* Chloride of iron dissolved in a mixture of one measure of ether to three of alcohol. It contains one per cent of iron.—*German Ph.*

out the night, or at least the greater part of it. Even in children and young individuals, where as an exceptional thing death has not been caused by suffocation through the blocking up of the larynx and air-passages, but is, however, threatening the patient's life through septicæmia, we should not hesitate to employ these same remedies. The dose must then, of course, be reduced so as to correspond with the age of the patient and the intensity of the disease. The English recommend the administration of large doses of cognac in diphtheria under the same circumstances as those in which they have been in the habit of using it in typhus; and I have myself used it several times, with permanently good effects, giving in the course of a day to an adult from four to six ounces. Where cognac alone does not seem to agree with the patient it can be mixed with wine—Bordeaux, for instance, or Carlowitz—or with sweetened water, and given in conjunction with ether and Bestuscheff's tincture. In children it should be mixed with simple syrup or the syrup of orange-peel, in the proportion of one part of cognac to two of syrup; in this shape it is borne well.\* In severe forms of pharyngeal diphtheria it will sometimes be necessary, even in children only three or four years old, to administer in the course of a day as much as an ounce or an ounce and a half of cognac; but the strong wines, such as Tokay, port-wine, and strong Bordeaux, also act powerfully upon the heart, and their use is therefore highly to be commended.

“It is extraordinary what large quantities of ether and alcoholic beverages may be taken, even by children, when the septic influence of the disease has lowered the excitability of the central organs and enfeebled the action of the heart. On the other hand, it is of course clear that if these be used prematurely and without judgment their effect may be the very reverse of what is desired; they may greatly increase

\* Charles West, in the course of one day, once gave with good results nearly four ounces of cognac and an equal amount of port-wine to a child four years old.

the frequency of the pulse and the temperature of the body, they may call into existence symptoms of irritation of the brain and spinal cord, or they may induce serious disturbances of nutrition by the gastric complications which they cause. The first appreciable improvement produced by these remedies shows itself in a diminution of the frequency and a greater regularity of the pulse, together with a more natural temperature of the surface, especially noticeable at the extremities; the pulse gradually improves in quality, is fuller and stronger; the sensorium, if previously clouded, becomes clearer; and that too notwithstanding the enormous quantities taken of ether and alcohol, which under ordinary circumstances would have produced a very marked obscuration of the faculties; and finally the patient shows signs of returning strength and energy in all his functions.

“If these manifestations of improvement are followed by genuine convalescence, we should, of course, gradually exchange these stronger stimulants for tonics, like quinine, iron, and good, nourishing diet; but at first it is well not to give up the cognac and strong wines altogether. As a rule, those patients whose constitutions have been deeply affected by the poison of the disease do not recover at once. After the lapse of a short time, and generally while the urine contains albumen, secondary paralyses or other sequelæ occur, and necessitate further treatment and constant supervision on the part of the physician.

“If during the subsequent course of the disease, or even during the first few days, the patient manifests increasing signs of apathy and prostration, his pulse diminishing steadily in frequency until it reaches perhaps the rate of from forty to fifty beats in the minute, and the temperature of his body falling to a proportionate degree, it is hopeless to expect any assistance from stimulating remedies. Neither ether, musk, castor, nor camphor will prove of any avail in averting death.



“*Local Treatment.*—In the management of the diphtheritic inflammation on mucous membranes we have two objects to keep prominently before us: first, the character of the inflammation itself; secondly, the signs of reaction which precede the process of repair, the *vis medicatrix naturæ*.

“The diphtheritic affection of the mucous membrane is distinguished as an exudative inflammation, which may increase from a simple catarrhal exudation to the pouring out of a fibrinous effusion upon the mucous membrane, or may even lead to the mortification of the tissue itself through the amount of inflammatory products and of micrococci; at the same time the entrance of vegetable organisms into the blood and the absorption of injurious products of decomposition induce a general poisoning of the system.

“Any therapeutic procedure then which in any way involves the danger of promoting these processes will be already barred in advance. When retrogression of the pathological process takes place, and the false membranes become detached by the unaided efforts of nature, we find that this is invariably done through suppuration. The entrance of micrococci and the absorption of putrefying substances is prevented by a thick impermeable layer of pus-corpuscles, which at first infiltrate the superficial portions of the tissue, and ultimately pressing forth from it form a separating stratum of pus on the surface of the mucous membrane. The process of healing in the case of wounds which are the seat of diphtheritic infection is accomplished in the same way, as I have repeatedly demonstrated in diphtheria of the respiratory mucous membrane; the removal of dangerous matters is accomplished here too by means of suppuration.”

After condemning local blood-letting and the application of ice as not only useless but as absolutely hurtful, Dr. Oertel next considers “the effort to remove the seeds of the infectious material from the mucous membranes by mechanical detachment of the pseudo-membranes, or by destroying them with



caustics or chemical solutions; and secondly, the aim to effect by astringents mainly a contraction of the inflamed mucous membrane and a limitation of the exudation.

“Now, as far as concerns the *mechanical* detachment of the pseudo-membranes as being sources of inflammation, it certainly requires only a brief reference to the pathology of the process to make evident the uselessness and danger of such an interference. It can not be enough insisted on that in diphtheria of the mouth and throat the contagious material is not confined to the false membranes, but is present throughout all the mucous membranes involved, as well as noticeably in the fluids of the mouth, in greater or less quantity. If now we attempt the mechanical detachment of the deposit, which in the beginning of the process is still quite firmly adherent, it always results in the production of small wounds of the surface of the mucous membrane, as shown by bleeding points where the individual capillaries have been torn. The possibility of an easier and considerable entrance of vegetable parasites and products of decomposition into the tissues is thus readily afforded, and, as proved experimentally, the life of the patient is put in far greater danger. The immediate result of such mechanical violence is, as a rule, the rapid reproduction of the pseudo-membranes, and at the same time they spread over a greater extent, owing to the increase of local inflammation and fibrinous exudation. But the final results where such a procedure has been resorted to are extraordinarily bad; the vast majority of patients, and where the diseased process is intense the whole of them, succumb to the infection of the general system.

“In the attempt to combat the local process by *cauterization* we meet with a state of things similar to what occurs when a simple mechanical detachment of the pseudo-membranes is attempted. This procedure was one of the earliest employed against diphtheria, and since it agreed very closely with the theoretical views held on the subject it was soon very widely

adopted. Not only is it impossible completely to annihilate the diphtheritic contagious material, even by repeated cauterization, when it has once become diffused throughout the whole buccal cavity, though every patch be never so carefully destroyed, but it is also impossible to combat the local disease by attempts to convert the specific inflammation into a simple one by these cauterizations. The immediate result of even the most prudent cauterization is always a certain degree of mechanical violence to the inflamed mucous membrane, and the more circumspectly we endeavor to destroy all the grayish-white deposits the more is the subepithelial tissue of the mucous membrane laid bare, the resulting slough failing to afford thorough protection in the way of a covering. In the cavity of the mouth, and in the mucus and saliva it contains, growths of micrococcus, as products of decomposition, are present in sufficient quantity to easily find their way into the lacerated parts of the mucous membrane, even though these be scarcely as large as a pin's head or only discernible with the microscope; and besides, the increased inflammation caused by the mechanical and chemical irritation furnishes a much more favorable soil.\* I was enabled to observe these facts and prove them experimentally as long ago as 1864 and 1865. There can be no doubt then that the unfavorable results which have been attained on all sides by cauterizations, more or less energetically practiced, must put a stop to this procedure, even if in its stead we should be obliged to resort to the opposite, the purely expectant and symptomatic treatment.

“But even the attempt to dissolve the pseudo-membranes chemically will prove practically valuable only so far as it can widen the space encroached upon by the membranes. But the danger of suffocation is scarcely to be feared when the throat alone is affected, however thick the membranous deposits may be, but only when the larynx and trachea are involved at the same time, and when, owing to the encroach-

\* Compare *Aertzl. Intell.-Bl.* 2868. No. 31.

ment of the membranes, it becomes of vital consequence to remove them. With regard to the affection of the mucous membrane itself, as well in the case of the mouth and throat as in that of the other air-passages, the solution of the false membranes by chemical means can not, as I have shown, have the least influence so long as the inflammation itself is not subdued. After dissolving the pseudo-membranes a new fibrinous exudation takes place, a second one forms, and even sometimes a third, without the treatment having gained any advance upon the disease. It is a necessary condition for improvement that after the removal of the false membranes the exudation also should cease, and a corresponding reaction, with energetic production of pus and new formation of cells, should take place upon the mucous membrane, which has been deprived of its epithelium and perhaps too of the uppermost of its layers of connective tissue. The danger too of a general systemic infection is just as little diminished by the chemical detachment of the pseudo-membranes as by the mechanical; and besides, in the former case the possibility of the introduction of masses of micrococcus and of decomposing substances into the mucous membrane, already laid bare and deprived of its epithelium, is greatly increased; the vegetable parasites and products of decomposition present in the mouth and pharynx are just as little destroyed by the chemical agents used for dissolving the membranes as by the caustics, which were formerly employed locally. When therefore it is not a question of treating a mechanical closure of the air-passages, or of averting the danger of threatening suffocation, we have no reason for using this procedure.

“Lastly, it was quite early thought possible to obtain by *astringents*, especially in the form of gargles, ‘an increase of the organic cohesion of the mucosa,’ and thereby to antagonize the threatened loosening and dissolving of the tissue. Without considering the theoretical notion lying at the foundation of this treatment, no diminution of the exudation on the inflamed

mucous membranes could be obtained by ever so energetic an employment of these means; but, on the contrary, through the irritation caused by these articles, an increase of the inflammation would be occasioned and kept up. Just the same conditions obtain here as in exudative inflammations in other mucous membranes; if an energetic treatment with astringents is employed in the acute stage, we have as a result an increase of the diseased process. But even supposing it possible to obtain a diminution of the fibrinous exudation by such means, still nothing would be gained in this way toward the cure of the processes of inflammation and decomposition in the mucous membranes. Neither does it affect the detachment of the pseudo-membranes and destruction of the masses of micrococcus, since these, unless nature interposes a boundary by the formation of pus, may continue to grow unmolested within the tissues; nor is a stop thereby put to the decomposition of pathological products and the possible formation of injurious substances in the mouth and throat. Finally, as concerns the statistics of the empirical results, they do not testify in favor of the curative action of these remedies, since the astringents have proved themselves completely useless in every important case; and in the great number of cases which run an easy course, and are confined to a local manifestation, the favorable results are capable of an entirely different explanation.

“In contrast to these various methods of limiting the further progress of diphtheria by antiphlogistic, caustic, astringent, and similar means, the intent of which is to combat the inflammatory reaction of the mucous membrane caused by the fungi, is the effort which has been made to excite energetically a rapid and abundant production of pus. I endeavored to solve this problem by the employment of moist warmth, in the form of hot vapor, by means of which a temperature of from 113° to 122° F. was kept up for a considerable time in the mouth of the patient, and I could at once determine the

appearances of reaction due to the attempt; viz., an abundant suppuration, causing demarkation.

“The first appearances which are observed as a result of the operation of hot vapor are always constant, and distinctly noticeable as early as at the end of from twelve to eighteen hours, during which the inhalation has been practiced hourly or half-hourly for a quarter of an hour at a time; but these effects will be developed more slowly if a considerable fibrinous exudation, with partial decomposition of the pseudo-membranes, has already taken place, and the capacity for reaction of the tissues is almost extinguished; or they will not be induced at all where the process has already run into septicæmia. The margins of the diphtheritic deposits, which generally pass imperceptibly into the surrounding tissues, become more sharply defined, and contrast strikingly with the intensely-reddened mucous membrane. The membranes therefore at the first glance seem enlarged. In some places too it will appear as if new membranes had formed where before there had been none. This is due to the fact that they had previously escaped notice from their small size, and from the presence of mucus, which concealed their outlines. Thus it will appear as if the disease had increased in intensity. The operation of the hot vapor, however, has been to induce a considerable excretion of pus-corpuscles, and these have infiltrated the epithelium, or its delicate network, which was already infected and grown full of micrococci. Under longer continued operation of the hot steam soon no further enlargement of the patches will be noticed. The pseudo-membranes become gradually thicker, and are raised up from the mucous membrane; their whitish-gray color becomes more yellowish or of a dirty gray, and their surfaces wrinkled and uneven, while the redness of the adjacent mucous membrane also fades and the swelling disappears. After some days we obtain with the necessary amount of suppuration a complete detachment of the pseudo-membranes, and they are expectorated

by the patient, either whole or in single, scarcely noticeable fragments, or are possibly in part swallowed. The thickness of such members, as a rule, never amounts to less than two mm.

“In the application of the hot vapor an ordinary broad pot, with boiling water or infusion of mallows, can be used, from which the vapor as it forms is conducted through a suitable funnel, as hot and abundant as possible, into the mouth of the patient; or, if we prefer it, we may use an apparatus which is expressly made for such purposes. This apparatus, which I have used for several years, wonderfully facilitates the employment of hot vapor, especially with children. The wide conducting-tube is simply placed in front of the open mouth, or is allowed to be taken into the mouth itself, and a uniform development and introduction of the hot vapor is thus secured. With this apparatus we can at the same time accomplish a thorough cleansing of the cavity of the mouth and throat from mucus and the fluids of the mouth, by employing a fluid which dissolves the mucus, but which at the same time acts indifferently on the organism. Such a fluid, steadily flowing over the mucous membrane, washes away masses of mucus, remnants of food, and other products of decomposition. We can also use suitable weak solutions of chloride of sodium, or chlorate of potash or other alkalies; only we must avoid strong disinfecting substances, such as carbolic acid or permanganate of potash, because after long-continued inhalation more or less of these substances is always carried into the bronchi, and may produce symptoms of irritation.

“Solutions of common salt or chlorate of potash, if this latter be preferred, of the strength of from ten to fifteen grains to the ounce, produce no injurious effect upon the organism; that is, they act perfectly indifferently when so used; and a long series of forced experiments, such as are not usually carried out in practice, never resulted in an affection of the



bronchi or of the lungs. How long these operations should last, and how often they should be repeated, must be determined by the degree of the affection; and it should not be forgotten that the shorter we make the sittings and the longer the intervals, so much the more slow and uncertain we find the reaction, while the disease thereby gains in intensity and extent. If therefore we aim at producing a rapid and free suppuration, the inhalations must be practiced as often and as long as possible, in quarter-hour sittings every half hour, and on the first and second day three or at the utmost four hours of sleep must suffice for the patient, while nourishment must be supplied in small portions in the intervals between the separate sittings. Later on, when the pseudo-membranes have been partially cast off, as well as in certain lighter cases, hourly sittings of about a quarter of an hour's duration suffice, and a longer time, six or eight hours, can be allowed for the night's rest of the patient. Even when a complete separation of the membranes has taken place, so long as a secretion of pus is still perceived at the diseased places on the surface of the mucous membrane, occasional inhalations should still be practiced every two or three hours, and these are also finally to be suspended after the cleansing of the mouth and throat is complete. By employing the atomizing apparatus a cleansing of the mouth and throat can also be combined with the inhalations. If a simpler mechanism is employed, these cavities will have to be kept clear of the accumulated masses by industrious washing and syringing. Disinfection and destruction of the micrococcus growths, of the products of infection and decomposition, will not, of course, be attained thereby.

*“Prevention of Septic Disease and General Systemic Poisoning.”*—We possess no method of completely disinfecting the diseased organs. It follows from our investigations into the treatment of the local inflammation that it is impossible to annihilate the diphtheritic contagious material completely by



mechanical removal of the deposits from the mouth and throat, or by destruction of them with caustics. Another way in which the objections inherent in these methods may be overcome is one which has long been a favorite in therapeutics; viz., to destroy, by industrious gargling and rinsing of the diseased cavities, the septic ferments and the substances which have entered upon decomposition and are acting as poisons. A glance at the history of diphtheria and its treatment shows that attempts of this kind have at no time been wanting. The most usual remedies for counteracting, as far as may be, the fungous growths and the progressive decomposition, and for limiting their entrance into the tissues and their absorption, are pre-eminently spirits of wine and diluted chlorine-water, in the proportion of one to three; in the next place, solutions of carbolic acid or permanganate of potash, one or two grains to the ounce; besides these medicaments, solutions of hypochlorite of soda, forty grains to the ounce, and of hyposulphite of soda, twenty-two grains to the ounce, and the crude flowers of sulphur, are also esteemed for the same object.

“The most suitable remedies then to meet the indication of opposing septic infection and general poisoning of the system successfully are, on the basis of experimental investigation, alcohol, freshly-prepared and properly-diluted chlorine-water (containing fifteen to thirty per cent of chlorine-water), solutions of permanganate of potash, one and a half to two and a half grains to the ounce, and of carbolic acid, two and a half grains to the ounce, or where this can not be borne, a like solution of oil of thyme in equal parts of spirits of wine and water. Since these substances, on account of their concentration, are not suited for inhalations, in which a certain portion is always liable to reach the lungs and occasion symptoms of irritation, they will most judiciously be used as gargles. With these the patient has to rinse his mouth once or twice at least every hour, or where this is not easily

possible, as in the case of small children, we must seek to cleanse the mouth and throat by the use of the syringe.

“But rational and promising as this antiseptic and disinfecting method appears, still we must never lose sight of two points; viz., that by these means *no limits* are set to the *inflammation* and *exudation* on the mucous membranes; on the contrary, possibly even an increase of these may be induced; then, in the second place, that, owing to the fact that these *fluids only occasionally bathe the mouth and throat, a complete destruction* of the masses of micrococcus *can not be effected*; for they grow not only in the thick, brawn-like deposits, but they may have already gained entrance into the tissues of the mucous membrane and into the serous canaliculi and lymphatic vessels. We can not then procure a complete destruction of these parasites by any one of the gargles which have hitherto been available, unless we are willing at the same time to cauterize destructively both the healthy and diseased mucous membrane, with all the results already detailed.

“Empirical knowledge, gained by practice in the treatment of diphtheria with antiseptic gargles for years past, quite agrees with these results, and the various specific remedies of this kind have in no way stood the test of experience.

“There is a possibility that the organism may limit and even prevent septic disease and a general infection through the *capacity for reaction which belongs to the affected tissues*. This is also the way in which nature herself effects a cure. I have repeatedly called attention to these facts, which I have observed during several years past, and Professor Eberth, in Zürich, has expressed a similar opinion in regard to the healing of diphtheritic wounds.

“In the case of the mucous membrane deprived of its epithelium, and covered with fungous growths and inflammatory exudation, if a due reaction sets in, and the cell-formation is active, as in a diphtheritic wound, the micrococci are washed away with the pus; or in case a thick layer of

fungus has already been formed, this will be removed by a suppurative process of demarkation. Inversely, in case of slight reaction of the tissue, with rapid increase of the parasites, the suppuration which ultimately sets in will no longer suffice to check the further advance of the fungi and septic materials; that is, to prevent the local and general infection. Finally, certain individual differences in the capacity of reaction of the tissues are also severally liable to favor or retard these processes; and this very difference, to which we would call special attention, must also take a part in those cases in which the fungus can not be regarded as the only cause of suppuration.

*"To set up a rapid and abundant suppuration* will then form one of the first indications of our present task, and with this we should always combine the use of antiseptic gargles, to secure the utmost possible cleansing and disinfection of the cavities involved. By the energetic use of hot vapor this demand will be met agreeably to nature, at the same time that the separation of the pseudo-membranes is hastened by it; the micrococci are partly taken up by the rapidly-forming pus-corpuscles, and partly washed away by them, and an impermeable layer is opposed to the septic masses, until finally the false membranous layer becomes completely detached from the rapidly regenerating tissue of the mucous membrane. According to the individual peculiarity in capacity of reaction will this separation occur more or less rapidly; and it will depend upon the height the disease has already reached whether the septic affection and general poisoning can be prevented, and how far this can be done.

"The mode in which the hot vapor is to be employed to meet this indication will be the same as that which was found suitable in combating the local inflammation. The number and duration of the separate inhalations will be arranged in accordance with the intensity and extent of the local process, since the elimination of the fungi and septic materials follows

at once upon the casting off of the membranes. The longer the disease has already lasted, the greater the extent of the exudation and the more rapid its decomposition, so much the more energetically must the use of the vapor be pushed, the highest possible temperature being used, and the quarter-hour sittings following each other at intervals of half an hour. At the same time the mouth and throat must be carefully gargled or syringed out *every hour* with diluted alcohol or solutions of carbolic acid and permanganate of potash, two and a half grains to the ounce.

"Now, although the principles of the local treatment of diphtheria, as determined by pathological and physiological considerations, also generally serve as our guide in the affections of adjacent organs, still certain modifications must enter into this treatment if the diphtheritic process has occasioned a pseudo-membranous exudation on the mucous membrane of the nasal cavity, the larynx, the trachea, and the bronchi."

INJECTIONS OF IPECACUANHA.—Dr. De Mussey writes to the Practitioner that in chronic dysentery, and even in common chronic diarrhea, injections of decoction of ipecacuanha into the intestines are a common practice in Peru and in some other countries of South America. He has used this remedy with success in some cases of diarrhea unchecked by other means. His formula is this: boil one drachm of ipecacuanha-root for ten minutes in five ounces of water; let it infuse for one or two hours, strain off, and make use of the decoction as an enema. Habitually this enema is wonderfully well tolerated. No painful sensation, no irritation of the bowel, attends these injections in the greater number of cases. They can be retained for several hours without any difficulty, and even occasionally with a feeling of comfort and relief.

## *Notes and Queries.*

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THE LATE DR. JENNINGS, OF NASHVILLE.—Dr. Thomas R. Jennings, whose death was announced some months ago as occurring under circumstances so painful to his friends, was a man of no ordinary mark in our profession. During a period of more than twenty years he was the leading physician of Nashville, and his talents and professional learning would have given him a high standing among the medical men of any city in our country. Besides the eminent position to which he attained as a practitioner, he was for a number of years a professor in the University of Nashville, the fame of which he helped to maintain. He was moreover at one time a popular political leader, and showed himself the peer in eloquence and statesmanship of the able men who shaped the affairs of Tennessee thirty years ago. And yet, owing to a want of taste for those associations which bring physicians prominently before the public eye, and still more to his insuperable repugnance to writing for the press on medical subjects, he was comparatively unknown to the profession of his country.

The writer of this notice met Dr. Jennings in Baltimore, a young student of medicine, attending his first course of lectures, fifty years ago; namely, in the autumn of 1824. He was attracted, like the writer, to the University of Maryland by the fame of Davidge, Potter, De Butts, and Pattison, men of diverse powers, but all able teachers, who had raised the institution to an eminence which it has hardly exceeded their day. He was a private pupil in the office of his uncle, Dr. Samuel K. Jennings, whose name was rendered familiar

to the profession in connection with a steam-bath, for which he held a patent. His father, Rev. Obadiah Jennings, D. D., was a learned Presbyterian minister, settled over a church at Washington, Pa., at the time he went to study medicine in Baltimore. The greatest care was bestowed on his education by his father, and he received the degree of A. B. in Washington College before he was seventeen years old. Few more finished scholars were to be found in the profession of our country in his day.

After taking the degree of M. D. in the University of Maryland he removed, in 1828, to Nashville with his father, who had been called to the First Presbyterian Church in that city, of which he continued to be pastor while he lived. In the spring of 1830 Dr. Jennings and the writer met again, in the Medical Society of Tennessee, which the physicians of the state had assembled at Nashville to organize. His modest, dignified bearing, and the air of refinement and intellectual culture about him, impressed most favorably all who came in contact with him, but he declined to take any active part in the business of the society. In the fall, having removed to Nashville, I found him lecturing to a small class of young lawyers and medical students on anatomy, while he was waiting for professional business. Among those whom I met at his rooms the first evening I visited them I remember, with interest, his brother-in-law, Mr. H. A. Wise, then on the eve of quitting Nashville for his old home in Virginia, where he has since taken so distinguished a part in the affairs of the nation. Dr. Jennings had given one or two courses on anatomy, and had the reputation among the physicians of the city of being a learned anatomist and an eloquent lecturer. All spoke of him as a young physician of extraordinary talents and unbounded zeal and industry in his profession. In the course of the winter an association of the professors in the University of Nashville and other literary gentlemen of the city was formed for giving a course of lectures on literary

and scientific subjects before the public. Dr. Jennings delivered two lectures of the course—one on the heart, the other — on the brain; and I speak with perfect confidence when I affirm that in all the series, though some of the best scholars and most gifted men of Nashville took part in the course, none were more admired than his either for matter or the grace of their delivery. They at once raised the author with the public to the highest rank as a writer and lecturer. They combined every excellence of popular scientific discourses—spirit, taste, animation, and learning. With the demonstrations and anatomical details were mingled poetry, humor, and sentiment with a judgment and taste that delighted all hearers. I was struck with them at the time as unsurpassed by any scientific lectures I had ever heard, and I remember them still as among the happiest efforts of the kind to which I have since listened. At that time his professional duties interfered but little with his studies, and he had consequently leisure to bestow upon his lectures all the time and labor he chose and thus give to them the utmost polish. They were written out carefully and then committed to memory, so that the effect of their delivery was that of extemporaneous lecturing.

During the winter I met Dr. Jennings often and saw much of him. I have a most pleasant recollection of the evenings spent with him, when the conversation, turning generally upon literary subjects, brought out his fine colloquial powers to the greatest advantage. Later in life he is said to have grown unsocial, but at that time he took great pleasure in society. My interest in him, excited at first by his bright parts and studious turn of mind, was much enhanced by the patience with which he was awaiting the practice that was to render him independent.

On becoming connected with the medical department of Transylvania University, a year later, one of the first things I did after reaching Lexington was to speak to Prof. Dudley of Dr. Jennings as a lecturer and teacher whom I thought



it would be wise to bring into the school as demonstrator of anatomy. In venturing to express this opinion to my experienced colleague, after so brief a connection with the school, I may have been actuated unconsciously to some extent by a wish to advance my young friend, but assuredly I believed that his accession would give additional strength to the institution. Dr. Dudley, however, saw, as he thought, insuperable objections to a scheme which looked to the prosecution of practical anatomy in Lexington, where it was nearly impossible to obtain the subjects, and my suggestion was courteously but very incisively declined.

Early in 1833 cholera, which had prevailed in many of our large cities the year before, broke out with great malignity in Nashville, and with this epidemic began Dr. Jennings's prosperity. It brought him into public view as a practitioner and laid the foundation of his fortune. One of the early victims of the pestilence was Dr. James Roane, one of the most estimable of men and a physician of the greatest popularity, who added to his eminent social worth high general culture as well as large professional attainments. He was, in a word, the scientific, the scholarly physician of Nashville, and in this respect Dr. Jennings was like him, and naturally succeeded to a large share of his practice. It was not long in fact before Dr. Jennings succeeded to the chief part of his fame and influence in the city.

The position which he had waited for so long he could not afterward be tempted to abandon, but adhered faithfully to Nashville, retaining his place as leading physician of all his region of country, until wealth and declining health rendered him indifferent to professional business. When the Medical Institute of Louisville was about being organized in 1837, while he was still full of youthful ambition as a medical teacher, he might have had the chair either of anatomy or surgery in the school if he had desired it, but he declined the honor, preferring his lucrative practice to a professorship

with all its prospective advantages; and at a later period, when the success of the institute was assured and it was attracting large classes, he declined a similar offer. When the medical department of the University of Nashville was created, in 1851, it was generally expected that he would take part in the enterprise; but his name, although it had been long associated with the university in nominal connection with the chair of anatomy, did not appear in the list of professors. It is said that he was incredulous about the success of the projected school. It was affirmed at the time that he was in the habit of predicting that it would never have students enough to fill the back room of his office. But a very short  
convinced him of his great mistake, and eventually he accepted the chair of institutes of medicine and clinical practice, and was transferred to the chair of anatomy, made vacant by the death of Dr. Porter, a year or two later.

It has been stated by his colleagues that he did not rise in either chair to the height as a lecturer which the public had been taught to expect by his early efforts as a private teacher. Perhaps he had waited too long. It may be that he had lost something of the enthusiasm which imparted a charm to those efforts; or the cares of a laborious practice and the independence that follows wealth may have rendered him less anxious to please; or possibly he found it dull to lecture to medical students on anatomy or the philosophy and practice of medicine after having shared in the excitement of the political arena. How else, with his great advantages of mind and person, his finished scholarship, and his ample learning and experience in his profession, he should have failed to reach the first place as a teacher, it is difficult to understand. He seems never to have entered heartily into the interests of the school, partly perhaps because he delayed going into it until its fame was established, and partly also, no doubt, because of his engrossing practice; and he left it, after a few years, in no amiable temper with his colleagues. In fact,

before age should have begun to tell upon his vigorous frame, his friends had remarked a change in his character, which betokened the beginning of the cerebral trouble which finally ended in insanity. He became querulous, suspicious, and moody. He lost the young wife whom he had married late in life, and to whom he was tenderly attached, and not long afterward his large fortune was mostly swept away by the civil war. Under these repeated disasters his mind became clouded with melancholy, which assumed a suicidal turn. After an attempt some time ago to commit suicide in Nashville, in which he was nearly successful, he finally succeeded in putting an end to his life at Narragansett Pier, Rhode Island, on the 7th of August last, in the presence of one of his nieces, a daughter of Governor Wise, who was traveling with him on account of his health.

Dr. Jennings had an unquestioned title to mind on both his mother's and his father's side. His father was eminent among the Presbyterian ministers of the United States. He was an eloquent preacher and a keen and powerful debater. His mother, whom he resembled in features and character more than his father, was a woman of an excellent understanding; a firm, judicious mother, with a cultivated mind, who watched with assiduous care over the education of her children.

The disinclination of Dr. Jennings to write for the public has been adverted to. He has left behind him nothing to justify the great reputation he sustained among those who knew him. A few addresses published at the request of his colleagues and pupils are all that he ever gave to the world. This reserve grew not out of any lack of ability to write, for his letters and written addresses showed that he wrote with ease as well as force; but it grew rather, I think, out of his fastidiousness. He was too proud to write unless he could produce something that would compare with the best. He was not willing to repeat in another form what had been

written before, and in the press of business he found no leisure to elaborate such articles as his taste exacted. Otherwise, I am sure, he might have been known as one of the strong medical writers of America.

L. P. V.

**BLOODLESS OPERATIONS.**—In order to assist in determining whether operations done by Esmarch's method are more liable than others to be followed by excessive capillary hemorrhage, I venture to report my own experience in the use of the elastic bandage.

*Case 1.*—Traumatic aneurism of the brachial; tumor opened and vessel tied; capillary hemorrhage slight. University Clinic, 1874. (See *American Practitioner*, February, 1874.)

*Case 2.*—Amputation of thigh, in lower fourth, for malignant disease of leg, Shelbyville, Ky., April, 1874; the patient, Mr. Wilson, kindly placed in my hands by Dr. Slaughter. Capillary hemorrhage not noticeable; good recovery.

*Case 3.*—Resection of radius in a girl aged ten years, near Simpsonville, Ky., assisted by my friends, Drs. Ryan and Bishop, whose patient she was. Capillary hemorrhage insignificant; recovered in good time.

*Case 4.*—Amputation of leg for malignant disease of foot; Mrs. H., of Middletown, Ky., under care of Dr. Cox, July 1, No marked capillary hemorrhage; stump healed kindly.

*Case 5.*—Amputation in lower third of leg for disease of ankle-joint, performed on a man under my care, at my request, by Dr. W. O. Roberts, July 2, 1874, at SS. Mary and Elizabeth's Hospital. Capillary hemorrhage not unusual; good recovery.

*Case 6.*—Amputation in lower third of leg for compound fracture of ankle-joint, July 4, 1874, at SS. Mary and Elizabeth's Hospital. Capillary hemorrhage slight; good recovery.

*Case 7.*—Removal of metatarsal bone for necrosis; patient a lad from near Glasgow, Ky. University Clinic, Oct., 1874. No capillary hemorrhage; cure speedy.

*Case 8.*—Amputation of leg; University Clinic, Oct., 1874. Capillary hemorrhage insignificant; good recovery.

*Case 9.*—Trephining lower end of tibia for abscess, hospital clinic, Indianapolis, Ind., November, 1874. No capillary hemorrhage.

*Case 10.*—Amputation (secondary) in lower third of thigh for injury of knee-joint, City Hospital Clinic, November, 1874. No capillary hemorrhage; patient died of exhaustion on the fifth day.

*Case 11.*—Operation for necrosis of tibia, December, 1874, College Clinic, Indianapolis, Ind. Capillary hemorrhage slight; case progressing favorably.

*Case 12.*—Trephining head of tibia for abscess; Mr. Copely, at St. Joseph's Infirmary, Dec., 1874. No capillary hemorrhage; wound healing kindly.

It will thus be seen that as far as I have had an opportunity of observing parts subjected to Esmarch's bandage capillary hemorrhage has in no instance excited attention, much less caused inconvenience. I incline to the opinion that in the amputation done at Shelbyville the patient, a very old and much-enfeebled man, would probably have succumbed under any considerable loss of blood, a contingency happily saved him by Esmarch's method.

DEATH OF DR. EWING.—Dr. U. E. Ewing, the oldest physician of Louisville, died of apoplexy, at his residence, on the 23d of December. For a number of years Dr. Ewing has not been engaged in practice, but he was long one of the most popular practitioners of the city. A man of strong practical sense, his influence was felt in all the business-circles of the city, as well as in the walks of his profession. He was born in Logan County, Ky., on the 23d of July, 1799, and was one of the early graduates of Transylvania University. By industry and the wise management of his affairs he accumulated an ample fortune.

# THE AMERICAN PRACTITIONER.

FEBRUARY, 1875.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### THE QUESTION OF THE RELATION BETWEEN RACHITIS AND SYPHILIS.

BY R. W. TAYLOR, M. D.,

*Surgeon to the New York Dispensary Department of Venereal and Skin Diseases.*

I have been much surprised at the uncertainty and error of opinion which is entertained even by competent observers as regards the relation of rachitis to syphilis. Though the pathology and etiology of both diseases are now, it may be said, quite well understood, and although the lesions of each are generally recognized as being distinct, yet an impression lurks in the minds of many that syphilis, particularly the hereditary form, may give rise to rickets. It is interesting now, not only as a matter of practical therapeutics, but also as a question of general pathology, to consider the relation, if any exists, between the two diseases; also whether the one can cause or predispose the other. Up to the present time this question has not been carefully analyzed, owing undoubtedly to the want of precise knowledge as to what osseous lesions are produced by syphilis. Thus in some text-books and many brochures we find the plain, unqualified statement

that syphilis may cause rickets. Submitted to a rigid scientific examination, this question should be put as follows: Is rachitis one of the usual conditions of, or are its osseous lesions produced by, syphilis? This brings the question to a scientific stand-point; while if it is put as follows: Can syphilis cause rickets? it is unprecise, and not in accordance with our advanced views.

Now it has happened that the coincidence of the rachitic dyscrasia has been observed in children who were born syphilitic, and from that fact undoubtedly the erroneous impression that the one disease was the direct result of the other has arisen. That this should be the opinion of older writers is not at all surprising, but the view has recently been put forth again by so eminent an observer as Parrot, of Paris. Reporting a case\* of a child who shortly after birth gave evidence of hereditary syphilis, and who died rachitic at its tenth month, this observer says, in his conclusions upon it (the italics are his own), "*then syphilis ought to be considered as one cause of rickets.*" The weak points in the case and the untenable deductions are palpable. Thus we find no history of the child from its early days to its tenth month, when it is found to be rachitic. It is not at all improbable that the syphilitic diathesis may have been so modified as to be no longer potent—in other words, cured—and that, owing to conditions which would act upon a non-syphilitic child in a like manner, it became rachitic. In short, the pathological sequence is not at all brought to our minds; but, given two states of the system, we are told, without explanation, that the one is the result of the other. The importance of the question in its present aspect therefore warrants its careful but brief consideration.

From our study of syphilis (we will here speak of the hereditary form) we know that it is a constitutional dyscrasia,

\* *Observation de Rachitis d'origine syphilitique, Gazette Médicale de Paris, No. 14, 1874.*



which manifests itself by peculiar and specific lesions of various organs and tissues. These lesions present generally well-marked characters, run a certain course, and are amenable to a certain treatment. Not only are the lesions cured by treatment, but the dyscrasia may also by prolonged treatment be extinguished. When syphilis develops lesions then they have a peculiarity of their own. This is especially true of the osseous system, which in infants is affected in a peculiar manner. Now, although there are certain features of syphilitic lesions of the bones which resemble those of rickets, a microscopic examination shows that they are essentially of a different nature. To make this point clear I would simply state that in early infancy syphilis induces an osteo-chondritis, a subacute inflammatory condition of the growing bone; whereas in rickets the lesion is in the main a want of the deposit of the lime salts in the cartilage. Now then, as the lesions of syphilis are peculiar and well-marked, and are of an inflammatory type, they certainly can not be classed with those of rachitis, which are not inflammatory and due to a general morbid condition of the blood. We have then two conditions or dyscrasiæ: the one syphilitic, inducing lesions of an inflammatory character; the other rachitic, inducing perversions of nutrition, markedly of the bones. There are other points of strong import which clearly show that there is nothing in common between the diseases. Syphilis is a specific hereditary or acquired dyscrasia, having peculiar lesions of a hyperplastic character, running its well-known course. Rickets is a condition which is not hereditary, is produced by conditions of want and poverty, or by improper food and surroundings, and its lesions are deviations of normal nutrition. Between these two diseases then there can be no etiological or pathological link; they are as clearly distinct as is scarlatina from hydrophobia. Therefore, if each dyscrasia produces its own peculiar lesions, can there be such a thing as rachitis producing a syphilitic lesion or syphilis a rachitic lesion? This

is no more possible than that one seed will produce a plant of another genus. Therefore we have got thus far in our inquiry: there being two dyscrasiæ of different characters, they each produce lesions peculiar to each and essentially different, the one from the other, in their nature.

Now the question arises, Can syphilis in any way modify the organism so as to predispose to the development of rickets? We have seen that syphilis has its essentially specific manifestations, now can it induce lesions which are not thus essentially specific? In other words, does it invariably show itself by clearly recognized and absolutely specific lesions? This is a point of much importance, as upon it hinges, if in any manner, the connection between the two diseases. Now we know that early in its course syphilis shows itself by morbid changes which are characteristic, but later on it affects the whole organism, visibly impairs nutrition, and retards functions in a manner that is not recognizable as being clearly syphilitic. It may also and does modify to a certain degree intercurrent diseases. This power of the syphilitic dyscrasia shows itself in a general condition of ill health; the blood-making function is interfered with, the general nutrition of the body is lowered. In this state the organism becomes susceptible of morbid and debilitating influences, and diseases are quickly engrafted on it, and these run a severe course. Now it appears clear to my mind that if there is any connection etiologically between these two diseases it consists in this power which syphilis has of inducing a depraved condition of the organism, in which the rachitic dyscrasia may be developed. Specifically and essentially there is no connection, as the condition may arise in an organism which has become lowered by any chronic disease. This view of the connection between the two diseases has the support of other facts. Thus we usually find that where rachitis is developed in a syphilitic subject it appears about the same time as it does in a non-syphilitic subject. Parrot's case is

a marked example; a child is born syphilitic, lives to be ten months old, and is rachitic. The same condition might have developed if the child was not syphilitic.

There is another point worthy of mention; namely, the result of treatment. Now it is well known what power specific treatment has over syphilitic lesions, and it is fair to infer that if rachitis was due to syphilis the treatment of the latter disease would cure the former. Such is not the case, however, as the rachitic condition is rendered worse by mercurial treatment. This latter fact is very important, as it shows clearly that there is a widely different condition in the two diseases. After these considerations then we are prepared to admit *that syphilis may be one of the causes of rickets, but that there is no specific relation between the two diseases; that syphilis may remotely cause rickets by its lowering effects upon the organism, in the same manner that any adynamic influence might produce the same effect.*

It might be suggested to those who may meet the coincidence of rickets in a syphilitic subject that it is essential to trace the causes of the latter disease by minute inquiry into the recent history of the child, and not to assume that because at some anterior date it was syphilitic necessarily its rickets was the result of that.

I have thus treated of this question in a suggestive but not exhaustive manner, in hope of calling attention to a fact which is palpable if carefully digested.

NEW YORK.

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## A CASE OF THORACENTESIS.

BY DOUGLAS MORTON, M. D.

A young mulatto woman was admitted into the City Hospital, August 2, 1874, with the following history gathered from her former physician: four months before she had been

delivered, after an easy labor, of a six-months' fetus. She did well for twelve days, when she had a chill, followed by a sharp attack of pleuro-pneumonia of the left side, which after lasting for a fortnight seemed gradually to pass away. Some days subsequently rigors, as many as two or three daily, occurred, and on examination a large pleuritic accumulation was discovered in the left side. When admitted to hospital she was much emaciated, and had rigors, hectic, and night-sweats; a morning temperature of  $100.5^{\circ}$ , with a rise of one degree in the evening; pulse 120. Dr. Chandler, one of the resident physicians of the hospital, detected a large accumulation of fluid in the left pleural cavity. On August 4th I drew off by the aspirator about forty ounces of very fetid pus, and for want of something better introduced a No. 8 female catheter to secure subsequent drainage. No improvement occurred in the symptoms; indeed the next evening, up to which time a large quantity of pus had escaped through the catheter, I found the patient decidedly worse. At the suggestion of Dr. Chandler injections of a weak solution of carbolic acid were now made into the cavity daily; and under these, conjoined with brandy, quinine, and nourishing food, the patient's general condition slowly improved. The amount of pus discharged continued considerable; but neither the drainage nor the means for washing out the cavity being altogether satisfactory, I attempted to cut out a section of rib. The patient bore chloroform so badly, however, I had to content myself by simply enlarging the opening with the bistoury. The incision was made between the eighth and ninth ribs, an inch and a half behind the first opening, and through it a tube a quarter of an inch in diameter was carried into the cavity, thus securing complete drainage and making injections easy. I now directed that after the daily washing of the cavity with the carbolic-acid solution there should be injected six grains of quinine suspended in water, and this allowed to remain. I did this with the view of testing the supposed antipyrogenic property

of quinine,\* and to avail myself of its known power over putrefaction of nitrogenous matter by, it is believed, destroying certain organisms which seem to bear some relation to the process.

From this time the patient made rapid improvement, and soon a perfect recovery. November 25th she told me that within three months after the last operation she weighed one hundred and thirty pounds, which was, I think, nearly double her weight just at that time. I was unable to make as thorough physical examination of her chest as I wished, but thought the lung had nearly if not quite expanded to its normal volume. The drainage-tube had been removed about a month, the discharge of pus having ceased some time before.

The history of this case throughout is, I think, of more than ordinary interest. In the first place, while we have nothing to show for the occurrence of metritis, of uterine phlebitis, or of peritonitis during the first twelve days after the miscarriage—which indeed is an exceptionally long time to intervene before the development of disease incident to the puerperal state—with the broader views we now have of septicæmia, of “embolhæmia,” and their relations with puerperal fever, we are bound, I think, to admit a rather strong probability of an embolic origin for the pulmonary and pleural lesions in the case. This probability is strengthened by the fact that the patient’s surroundings highly favored the occurrence of such an event, and still more by a circumstance connected with the treatment that I have not mentioned. A small quantity of either the quinine or carbolic mixture might be thrown in without producing irritation, but when a certain limit was exceeded most violent paroxysms of coughing were excited, during which she expectorated purulent matter. She told

\* This is one of a series of experiments which I reported in the *Practitioner* for November, 1874.

me too that occasionally she could taste the injected drugs. These things, I think, clearly proved a connection between the pleural cavity and some of the bronchial tubes formed by the rupture of an abscess.

There were other features that had important bearing upon the prognosis, and should be mentioned. The right lung was healthy and fairly competent for all the oxygenation required in the reduced condition of the patient; and there was no abdominal complication, tubercular or otherwise, to interfere with nutrition.

But the point in this history of crowning interest to myself is the rapid improvement that followed immediately upon the topical use of quinine, and this notwithstanding the last tube inserted slipped out a day or two after it was put in, leaving the first to do the whole work; a fact I attach not a little importance to, as it seems to be the present opinion of surgeons that either two openings, or one made very large by removal of a section of rib, are almost essential to a good result. This circumstance not only indicates the value of the quinine treatment, but shows that a case of empyema very unfavorable as to prognosis may get well without having to endure the painful operation (for these are unsafe cases for chloroform) of rib-trephining.

LOUISVILLE.

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## A CASE OF TAPPING THE BLADDER ABOVE THE PUBES WITH A BISTOURY.—RECOVERY.

BY WILLIAM H. MIXON, M. D.

I was called, June 14, 1874, to see Mr. M., aged sixty-eight years, an otherwise healthy man, suffering from retention of urine, supposed to be due to stone. He had passed no water since eight o'clock P. M. the previous day. He was



distressed by violent, frequent, and excessively painful efforts at micturition. I failed in my efforts to pass a catheter, and supposing there might be some spasmodic difficulty in the urethra, I gave him, without avail, several large doses of opium, a pill or two of belladonna, used the hot hip-bath, and finally had him to inhale chloroform. Digital examination through the rectum revealed considerable enlargement and some tenderness of the prostate. Meanwhile several hours had elapsed, no water had been drawn, and the patient's sufferings were becoming more and more distressing. I feared that unless relief was soon obtained all the long train of evils due to prolonged over-distension would occur. Dr. Geo. W. Sherman, living in the neighborhood, was called in consultation, and we agreed to continue for a few hours the means already used, and to endeavor to give anodynes by the rectum. The bowel, however, refused to tolerate even the smallest injection. The patient's efforts to urinate now became so violent that he passed his fæces involuntarily. His pulse began to grow frequent, but he had neither rigors nor fever. It was now decided to puncture the bladder. The enlarged condition of the prostate seemed to preclude the operation being done through the rectum, even had we possessed a suitable canula and trocar; but having none, we were confined to the high operation; and having no other instrument than an ordinary bistoury and a catheter at hand, and none within easy reach, I proceeded, after the patient had been fully anæsthetized, and twenty hours after he had last passed even a drop of water, to open the bladder in the hypogastric region. I experienced no difficulty, such was the enormous distension of the bladder, in effecting the opening, and on withdrawing my bistoury instantaneously inserting a No. 8 female catheter, through which the urine at once escaped, to the great relief of the patient, who soon fell asleep. To guard, if possible, against the occurrence of peritonitis, I continued the opium in grain doses sufficiently often to secure rest, applied cloths



wet with cold water over the abdomen, and gave tincture of digitalis freely. I remained with the patient during the night, which was passed in comparative comfort. The following morning he awoke in good spirits, though feverish and thirsty; temperature 100°; pulse 100, full, soft, and regular; but slight tenderness over the hypogastrium, none over the abdomen generally. The urine still ran through the catheter. I was now called away, and left the case in charge of Dr. Sherman, not seeing it again until the lapse of five days.

Small quantities of water had now begun to pass by the urethra. No symptoms had occurred to make any special medication necessary. The patient was eating, sleeping, and feeling well. Hoping to be able to get rid of the catheter, I now attempted to pass a gum catheter by the urethra, but failed. When this was withdrawn, however, considerable quantities of muco-purulent fluid followed. I touched the posterior portion of the urethra a few times with the nitrate of silver carried back on a porte caustic. A few days after, and eleven from the date of the operation, the urine resumed its natural course sufficiently to admit of removal of the catheter; but an attack of dysentery, which it required a few days to check, made it, in our opinion, inexpedient to do so. After a little further delay, making in all fifteen days from the time the catheter was introduced by the hypogastric opening, and where it had remained without exciting any appreciable irritation, the instrument was withdrawn, and the edges of the little wound at once approximated by adhesive strips. Union soon occurred, and the patient, in spite of our injunctions to be quiet, was a very short time after out squirrel-hunting. His health is at this writing perfect, and his urethra, to put it in his own words, "is in fine working order."

HOPE, ARK.

## HUMAN DISSECTION.\*

BY THEOPHILUS PARVIN, M. D.

The duty assigned your committee was to suggest such legislation as is necessary to facilitate the study of practical anatomy in Indiana. Believing that the final object will be best attained by presenting some salient points in the history of human dissection; considering some of the arguments which render such study of vital importance to medicine, and some of the injurious consequences to the profession and to society from its present illegality; referring to legislation upon this matter elsewhere, more especially in some of the other states, and finally suggesting a law for this state; this will be the plan and this the order pursued in our report.

We must go back to the famous school of Alexandria, about three hundred years before the Christian era, to find the first evidences of systematic and complete dissection of the human body. To two professors in that celebrated school, Herophilus and Erisistratus, is probably due the honor of taking the first steps toward the foundation of the science of human anatomy. A great chasm, bridged over by more than four centuries barren of any important historical facts relating to the subject, intervenes, until Galen stands before us, striving to ascertain from patient dissection of apes what the anatomy of man was—a sort of practical Darwinism—the dissection of human bodies not being tolerated by the Romans. Nevertheless it is probable, as has been asserted, that opportunities occasionally offered to this illustrious physician when, in the strictest secrecy having got possession of the body of an executed criminal or of a child whose parents had exposed it—a peculiarly Roman way of committing infanticide—he had a higher object of investigation than

\* Read before the Indianapolis Academy of Medicine, January 5, 1875.

a monkey; and possibly it was after one of these precious opportunities that he uttered those immortal words, *Compono hic profecto canticum in Creatoris nostri laudem*. Herein is a profoundness of reverence, a sublimity of thought, and a devoutness of utterance finding a counterpart centuries later in a scene in the life of Vesalius as depicted by the painter Titian. In a room with darkened windows lies a corpse, and standing beside it the young anatomist, who is filling the world with his fame; tall, with a noble head, covered with short, curly hair, and an eye fearless of man or fiend, scalpel in hand, just ready to search the mysteries of this body, fearfully and wonderfully made, which in its dumb dissection is eloquent in the proclamation of divine intelligence, pauses ere entering the shattered temple of a human soul, with his eyes intent on the crucifix in sacred worship. A feeling akin to this is no alien in the thoughtful mind of the student of practical anatomy. The rude jest and coarseness of behavior in the dissecting-room are as untimely as a fool's laughter or snow in harvest; and it is believed that the general tone of conduct in such a place is commonly very different from that which has sometimes been represented in the sensational stories and petty jests finding their way into newspapers.

Returning from this digression, we find that while the Saracens were the custodians of medicine practical anatomy made no progress, for human dissection was not permitted. Nothing was added to the knowledge, nothing subtracted from the errors of the past. We pass then from the time of Galen to the thirteenth century of the Christian era to find the dawn of the emancipation of this study; emancipation from the shackles of religious and social prejudice and legal enactments. Frederick II. of Sicily wisely required any one who desired to practice surgery to have a knowledge of anatomy, and then at the request of his court physician authorized him to give anatomical demonstrations. About a century later, in the year 1315, we find a professor in the

University of Bologna publicly dissecting two corpses; and from that time it was customary to have one or two public dissections every year in a university. Montagnana, a professor in the University of Padua, in the fifteenth century, could boast of having dissected fourteen bodies, an enormous number for that age. Subsequently Berenger, a professor at Bologna, claimed to have dissected more than a hundred; but some of these dissections were alleged to have been vivisections, and he was either exiled or fled.

The sixteenth century was rich in great anatomists, and the student of anatomy to-day is as familiar with the names of these discoverers as the student of geography is with the names of those bold navigators or explorers perpetuated in the countries, rivers, or mountains which their possessors first saw. Vesalius, Sylvius, Fallopius, Eustachius, and Varolius are names that constantly meet us in our text-books. Foremost among these illustrious men would probably be placed that brave Nethlander, Andrew Vesalius, for a time the pupil at Paris of Sylvius, and then the preceptor of Fallopius; brave because from grave and gibbets he snatched the vile bodies of malefactors, fighting with cannibal dogs that haunted the place of public execution at Paris for their possession; brave because in the face of the fierce prejudices of a generation reckless of human life and human agony, and pitilessly letting human beings endure all suffering and sorrow, cruelly forbidding that the lifeless corpse, the decaying body, might be studied for the alleviation of human misery, he stood up in defiance of all this insane wrath and dared to dissect; brave because he dared to break with the ape-drawn traditions of Galen and the dog-dissection of pedantic Sylvius, declaring that they did not represent the anatomy of the human body, and at the early age of twenty-eight years published his anatomical drawings and descriptions, setting at naught much of the teachings of the past; brave too, possibly, because when he had become famous and was basking in the sunshine

of the court of Philip II. of Spain, a court surgeon, he saw the gathering storm of wrath and religious zeal which was to deluge his fatherland with blood, forsook his patron, his honors and rewards, and departed on a pilgrimage to Jerusalem; a pilgrimage in returning from which, at the invitation of the Venetian senate, to take the chair made vacant by the death of Fallopius, his ship was wrecked, and he, escaping from the sea, perished of starvation on the island of Zante. It has indeed been alleged that the pilgrimage was a penance for having opened a supposed corpse when the heart was found to be still beating, and again that he went to escape a wife who was a fit representative of Xantippe; but the reason first assigned is vastly more probable than the second, and certainly at least equally probable with the third.

In the same century, rendered illustrious by the labors of these continental anatomists, it was ordained in England that each year the bodies of four murderers should be delivered after execution "to the corporation of barber-surgeons of London" for dissection. Subsequently Parliament added to the sentence of death public dissection of the body; and Blackstone remarks in his commentaries that the judge may direct the body to be hung in chains, but in nowise to be buried without dissection. (Com. iv, C. 14.) And thus the matter stood in England for many years; dissection was a penalty, a part of the punishment for crimes, just as hanging was. But a more liberal practice obtained on the continent, especially in Holland and Italy, and to one or the other of these countries English students were compelled to go for anatomical study. Meantime the demand for anatomical material became so great, the pecuniary recompense so large (Mr. Lizars, in 1826, speaks of subjects bringing twenty guineas in Edinburgh, and a private teacher of anatomy in London abandoned teaching because he was compelled to pay fourteen guineas for a corpse, while the students could give him but eight), that there sprung up not only a class of grave-robbers,

body-snatchers, or resurrectionists, but actual murderers, men who sacrificed human life to furnish dissecting-rooms. It is worthy of remark that Burke and Hare, of Edinburgh, who are supposed to have murdered no fewer than sixteen, and then sold the bodies of their victims, supplied at least some of those victims to the famous anatomist, Dr. Robert Knox. Not only in Edinburgh but also in London were murders thus committed. These fearful crimes probably hastened the passage by Parliament of "an act for regulating schools of anatomy." This was passed in August, 1832, and to some of its provisions we shall refer in a few minutes. And certainly evidence such as Sir Astley Cooper gave to the Parliament committee on anatomy, though given before the detection of Burke and Hare, was not designed to secure law-makers pleasant dreams. Sir Astley stated of resurrection-men that "they were the lowest dregs of degradation. There is no crime they would not commit; and as to myself, if they would imagine that I should make a good subject, they really would not have the smallest scruples, if they could do the thing undiscovered, to make a subject of me." He further stated that "the law does not prevent our obtaining the body of an individual if we think proper; for there is no person, let his situation in life be what it may, whom, if I was disposed to dissect, I could not obtain." In the discussion in Parliament upon the anatomy act it was proposed that the bodies of suicides should be given up for dissection; and Sir James McIntosh, a writer upon moral philosophy of great ability and distinction, actually stated that he could see no objection to the suggestion, only the number would not be sufficient to supply the demand. As Mr. Lecky has observed in his "History of Morals in Europe," the wide divergence of the classical from the Catholic conception of death appears very plainly in the attitude which each system adopted toward suicide. It is true that Pythagoras said it was forbidden men to depart from their guard or station in life without the



order of their commander—that is, God—but Plato permitted suicide under certain circumstances. Seneca advocated it, and so did Epicurus, Lucretius, Epictetus, and others, and Cicero praised the suicide of Cato. Christianity, however, never justifies the taking of our own life; it is self-murder. And when it was proposed that a Christian people, through their law-givers, should consign the bodies of suicides to the dissecting-room, it had no better moral basis than a similar disposition of the bodies of those who had undergone capital punishment, and was as unwise. Dissection should never be regarded as penal. Further, as indicating another error in securing subjects for dissection, we will refer to the position taken, when this matter was under discussion in England, by the celebrated Mr. Abernethy. His views were expressed in these words: “I have this feeling, that so strong is the necessity, that so much injury might be done by ignorance of anatomy, that so correspondent with the principles of justice is it, that those who have been sustained in illness and infirmity at the public charge, and who consequently die in debt to the public, should have their bodies claimed and converted to the public good,” etc. Merely because a “pauper, whom nobody owns,” it does not follow that his body is to be offered to science. Nay, such a doctrine is dangerous and unjust. Poverty must not carry its curse beyond the death-bed and into the grave, and Dives will often prove a better subject for the dissecting-table than Lazarus.

One of the sections of the British anatomy act, to which reference has been made, repealed the law giving the bodies of executed murderers for dissection. Another—and this is the essential one—the seventh, thus reads:

*“And be it enacted, That it shall be lawful for any executor or other party having lawful possession of the body of any deceased person, and not being an undertaker or other person intrusted with the body for the purpose of interment, to permit the body of such deceased person to undergo anatomical examination, unless to the*



knowledge of such executor or other party such person shall have expressed his desire, either in writing at any time during his life, or verbally in the presence of two or more witnesses during the illness whereof he died, that his body after his death might not undergo such examination; or unless the surviving husband or wife, or any known relation of the deceased person, shall require the body to be interred without such examination."

There is also a section making "provision in case of persons directing anatomical examinations after death." Another section requires that after the anatomical examination has been made the remains "be decently interred in consecrated ground, or in some public burial-ground in use for persons of that religious persuasion to which the person belongs," etc. Now, if this section has not been violated, there must be a fearful paucity of skeletons in British medical colleges and in the possession of British practitioners.

We pass now to consider very briefly the second topic indicated in the commencement of this report; namely, some of the arguments in behalf of human dissection, and some of the evils resulting from its illegality. Both in medicine and surgery a thorough knowledge of anatomy is the basis of correct diagnosis and of successful treatment; and such knowledge can never be obtained solely from diagrams, descriptions, plates, and models. Patient and studious dissection is the most important of all means for such acquisition. To assert these propositions is sufficient to establish them in all intelligent minds. Think how absurd it would be, were your watch in need of repairing, to trust the work to a man who had never examined the interior of a watch—who was not familiar, by careful study, with every part of that ingenious mechanism. But here is a vastly more complicated piece of mechanism—a human body deranged—and how shall its disorders be understood and remedied by one who has not by attentive observation, by careful and prolonged study, become familiar with all its integral parts and its wonderful

order? Only in the twilight of medical knowledge, only in the dim light of half-education, if not the thick darkness of ignorance, is disease regarded as an entity—some enemy that has entered the lordly habitation of man—and must be driven forth by superior force. Etymologically we know that disease is want of ease—discomfort; that it is a malady, an evil; but as physicians we regard it as a disturbance in one or several of the parts, organs, or systems which in their unity make up the individual, and in the perfection of their action result in health, or *wholth*, as the old Saxon has it. It is discord when there should be harmony, physical pain instead of pleasure; a wonderfully intricate piece of machinery, which is no longer working out its intended purpose, and for the time being fails in accomplishing desired results. To interpret the language of disease—to discover the evidences of a malady, to know where it is and what it is—we must know the constituent parts of the body; study them in their mathematical order, number, size, situation; in their physical order, consistence, elasticity, weight, color, etc.; in their chemical order, elementary composition; and finally in their organic order, those peculiarities and special properties of a living organism. Every physician knows how obscure the symptoms of disease are; but what tenfold deeper obscurity would settle over human pathology if the human body were made, as in the days of the Saracens and in many other periods of history, a sealed book! Every physician knows too that frequently disease manifests itself in parts remote from its real seat; that sharp, agonizing pain in the top of the head, which good old Sydenham termed *clavus hystericus*, has its cause far away from its place of manifestation; a severe pain in the knee may be indicative of disorder in the hip; those convulsions by which a child's life is in imminent peril may not find their primal cause in disturbed muscles, nor in any part of that nervous system at whose mandate these irregular movements, these fierce struggles, have occurred; those paralyzed limbs

may not indicate the least primary disturbance of their force-supplying center. But why multiply illustrations? Every day's practice tells the physician of the absolute necessity, of the unspeakable value of anatomical knowledge in interpreting the phenomena of disease.

In surgery the necessity for a thorough knowledge of anatomy is apparently, though not really, still more important. Need we tell you of surgical errors—errors involving human life? Fortunate is he who has never committed any, or sacrificed a life from failure to do the right thing at the right time. Many a time has an aneurism been opened, the operator believing it an abscess, and the patient bled to death. More than once has a patient died with strangulated hernia for want of a timely operation. Suits for malpractice are a perpetual reminder to the surgeon of the importance of anatomical study; and is it not strange, does it not seem unjust, that states should authorize these suits, and then place fines and imprisonment right between the surgeon and the most important means of his preventing such suits; namely, human dissection? Put out a man's eyes and then punish him for not seeing!

The importance of studying operative surgery upon the cadaver can not be better enforced than by quoting the words of two of the most eminent of British surgeons, Sir Astley Cooper and Sir William Lawrence. In answer to the question, "Can the young practitioner be expected to possess the necessary courage in performing an operation on the living if he has not already been taught to perform similar operations upon the dead body?" the former replied, "He must be a blockhead if he made the attempt; and the practice of the most sensible and expert surgeons in London has been to visit receptacles for the dead for the purpose of performing the operation they were about to execute on the living, if the operations were in the least novel." Sir Astley was then asked, "Can a student know where to cut with freedom, where

with caution, and where not at all, if he has not an intimate knowledge of the structure of every part of the human body?" and his answer was, "I would not remain in a room with a man who attempted to perform an operation in surgery who was unacquainted with anatomy, unless he would be directed by others; he must mangle the living if he has not operated on the dead." And Sir William, when asked, "Do you not consider it essential to a good course of surgical instruction that the student should perform operations upon the dead body which he will have to perform upon the living?" said, "I consider it essential; operations can not be performed on the living body without the risk of serious and even fatal errors, unless the surgeon shall have acquired a knowledge of anatomy generally, and have repeatedly operated on the dead body."

Enough has been said on this branch of the subject to justify us in demanding in behalf of the medical schools of the state—in behalf of the people themselves, who have as deep an interest as any—that the state should legalize the study of practical anatomy. The supply of anatomical material has much to do with the prosperity and usefulness of a medical school. The state that renders it difficult or impossible of attainment drives away medical students from her colleges. The profession denied the opportunity of reviving anatomical knowledge elsewhere obtained, or of acquiring new knowledge, is not near so useful as it otherwise would be in the healing of disease, in the curing of injuries, and in the saving of life; and then the people, who through their law-makers require this denial, are themselves the most sufferers. How are subjects obtained for dissecting-rooms here and in some of our neighboring states? By that which is to the vast majority of people the most odious and abominable and perilous work, grave-robbing. Many a grave in this state has been robbed to supply the dissecting-rooms of cities in other states. So long as corpses bring the price

they do grave-robbing will continue, and this in spite of court and jails. Nor are the men who engage in this work generally troubled with any profound sympathy for the relatives of the deceased; they are not respecters of the grave; to them a corpse is a corpse, just as "a primrose by the river-bank a primrose is and nothing more." Admitting that the legalizing of dissection has certain unpleasant and disagreeable features, it is not one tenth as bad as grave-robbing and traffic in human corpses. Subjects will be had as long as there is such demand, as long as prices are so high, if every graveyard in the state were frowning with cannon and bristling with bayonets. But is dissecting a human body such a terrible evil? Is burial a part of Christianity? Is the corpse that rots in the ground, and from whose dissolved elements the grass draws nutriment, and that grass feeds the ox, whose flesh is in turn eaten, is that corpse, accepting the creed of bodily resurrection, any better prepared for the soul to renew its habitation therein than the corpse whose skeleton, nicely prepared, adorns some anatomical museum?

Considering the ceaseless circles of matter—matter first inert and then entering into vegetable organisms, thence into animal, thence into human existence, and back again to dead matter—one can hardly tell whence he is and of what he is made. Really he may be living off of his ancestors in a more literal sense than that expression is generally used—eating his great-grandmother, for example—and that would be infinitely worse than if she had been dissected a hundred years or so ago. If these bodies, carefully buried in consecrated grounds, are so essential for a safe resurrection, how unfortunate the Christian martyrs who underwent involuntary cremation, and whose ashes were cast into the rivers and then borne to the sea! Alas too for the sacredness of the graves which this generation worship! Another generation comes, and briers are growing and cattle are browsing where loved forms were laid to rest, or commerce roars her factories and

her depots in the very city of the dead. So far as the mere body is concerned, "it may be blown about the desert dust or sealed within the iron hills," burned in the air, or buried in the ocean, and it will be of no possible importance to us. Even if our bodies could be preserved as long as the Egyptians preserved theirs, all would be vanity, feeding the wind and folly. These strange people, who had such a horror of any thing approaching human dissection that, according to Herodotus, they pursued with stones the embalmers as soon as their work was done, very much as some people nowadays under some circumstances would stone a doctor for dissecting, seeking a knowledge by which their lives might be saved, did not secure more than temporary preservation to their dead. Sir Thomas Browne, a physician whose eloquent utterances two centuries ago are nobler than monument and more enduring than mummy, has well said, "The Egyptian mummies which Cambyzes or time hath spared avarice now consumeth. Mummy is become merchandise; Mizraim cures wounds and Pharaoh is sold for balsams."

Let us now pass to the topic of legislation. We have already given some of the prominent features of the law enacted by the British Parliament. Similar laws exist in various other European countries; at least there is no difficulty in the great medical centers of the Old World in readily obtaining subjects for dissection. Some of our states have passed laws more or less favorable to the study of practical anatomy. The following is the roll of honor as completely as we can obtain it. A part of the list has been obtained from "Butler's Register," the rest from actual examination of the laws of different states, so far as they are found in the law library of Indiana: Alabama, Connecticut, Illinois, Iowa, Kansas, Maine, Massachusetts, Minnesota, New York, Pennsylvania, and Vermont. We shall briefly refer to the legislation in some of these states, giving, however, that of Illinois in more detail, as it has been the most recent and in most respects



may be a suitable guide for the legislation so imperatively needed in this state.

Maine permits any person in the state to bequeath his body to any regular physician or surgeon for the advancement of anatomical science, unless some kindred or friends ask to have it buried within three days after death; so too when a person convicted of crime dies or is executed, the corpse shall on request be given instructors in medical schools established by law, otherwise to any regular physician or surgeon, for anatomical purposes in this state, unless the deceased requested to be buried or friends desire it. The receiver is required to give one hundred dollars bond that the corpse shall be used only for anatomical purposes, and in this state, and shall then be decently buried.

In Alabama licensed physicians and surgeons may receive the bodies of executed criminals or bodies delivered by or with the consent of their relatives; while any one who robs a grave must be fined from one hundred to five hundred dollars, and may also be imprisoned at hard labor for not more than six months, and he who purchases or receives such body must be fined from one hundred to five hundred dollars.

Connecticut permits dissection of a body if the consent of near relatives is first obtained, and the dissection also of persons capitally executed, at the discretion of the court, and also of convicts in the state prison who may die having no known relatives, and with the approbation of the directors of the prison. But the teacher, lecturer, professor in college, academy, school, or medical institution shall give bond in one thousand dollars to the state treasurer before he can make any anatomical or surgical experiments on the body of any deceased person in any building in which the students of such college, academy, medical institution, etc., are being instructed, and that no corpse shall be used except as permitted by law. But Vermont has perpetrated the most grave, grim, and



ghastly joke in her law upon this subject. She permits the dissection of executed criminals, provided friends or relatives do not object; and—height of nobleness, depth of love, breadth of wisdom!—a doctor may be dissected, he having to this end bequeathed his body, if relatives do not object. Here again the penal idea of dissection, and murderers and doctors brought in delightful juxtaposition. Whether united in life or not, Vermont proposes that they shall not be divided in death.

The Illinois law, approved February, 1874, is as follows:

“SEC. 1. It shall be lawful in cities and counties whose population exceeds one hundred thousand inhabitants for superintendents of penitentiaries, wardens of poor-houses, coroners, and city undertakers to deliver to the professors and teachers in medical colleges and schools in their state, and for professors and teachers to receive, the remains or body of any deceased person for purposes of medical and surgical study: *Provided*, that said remains shall not have been regularly interred, and shall not have been desired for interment by any relatives or friends of said deceased within forty-eight hours after death; *provided also*, that the remains of no person who may be known to have relatives or friends shall be so delivered or received without the written consent of said relatives or friends. *And provided further*, that the remains of no one detained for debt, or as a witness, or on suspicion of crime, or of any traveler, or of any person who shall have expressed a desire in his or her last sickness that his or her body may be interred, shall be delivered or received as aforesaid, but shall be buried in the usual manner; *and provided also*, that in case the remains of any person so delivered or received shall be subsequently claimed by any surviving relative or friend for interment. *Provided further*, that notice shall be given to friends or relatives of any deceased person, if such friends or relatives are known to the authorities.”

The second section requires the said professors and teachers to bury the remains in some public cemetery. The penalty of failing to do this is a fine of from fifty to one hundred dollars, or imprisonment in the county jail from six to twelve months, or both.

The third section requires that these bodies shall be used

for medical and surgical study only, and in the state of Illinois. The penalty is imprisonment in the county jail for a term not exceeding one year.

The fourth and last section affixes the penalty of imprisonment in the county jail for a term not exceeding two years to a party giving or receiving a corpse in violation of any or of all the provisions of the first section.

Another Illinois law authorizes the court to order, on the application of any respectable surgeon or surgeons, that the body of the convict shall after death be given the surgeon or surgeons for dissection, provided no objection is made by a relative.

After devoting considerable study to the subject, we believe the Illinois law is in most respects an excellent one, and that a similar act passed by our legislature would be wise, useful, and most desirable, a blessing alike to the profession and to the people. Above all, let such act be so framed that dissection shall neither be illegal, so far as the dissector is concerned, nor penal in reference to the subject of dissection, and an end will be put to the robbing of graves and the traffic in human bodies.

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#### A CASE OF CHLOROFORM NARCOSIS RESUSCITATED BY NÉLATON'S METHOD.

BY M. H. JORDAN, M. D.

Miss —, aged eighteen years, stout, of full habit, and seeming to be in perfect health, applied to Dr. Eubank, a dentist of this place, to extract a tooth. She was accompanied by Dr. F. D. Nabors, and concluding that she could not undergo the operation without chloroform, this after some solicitation was administered by Dr. N. It was given

by means of a napkin made cone-shaped and held over the mouth and nose. After four or five inhalations, some spasmodic movements of the face being observed, the napkin was removed, and the patient directed to open her mouth, which she did, when the tooth was extracted without pain. No indications of a return of consciousness being observed, and the pulse being found excessively small and feeble, and it along with the breathing soon ceasing to be perceptible, the patient was quickly placed prone on a bed, and Dr. I. W. Sears and myself sent for. Dr. S. arrived a few minutes before me, and, finding the jaws tightly closed, he forcibly opened them with the handle of a spoon, and pulled the tongue, which had fallen back upon the fauces, well forward. When I reached the scene the young lady was apparently dead. There was complete relaxation of the entire muscular system; the lips, face, and hands were livid; breathing and pulse had ceased. Having in mind the experience of Dr. Marion Sims in a case in many respects similar, so thrillingly described by that gentleman in his paper before the British Medical Association, we immediately inverted the patient's body, the head hanging down, while the feet were raised high in the air by Dr. Eubank, both legs resting over his right shoulder; Dr. Nabors supported the thorax; Dr. Sears kept the jaws open and managed the tongue; while I made efforts at artificial respiration by alternately pressing on the thorax and abdomen. After anxiously waiting for about five minutes for some indications of returning vitality, we were overjoyed at seeing one feeble attempt at respiration, followed after a long and painful interval by another, which gradually became fuller and more frequent, accompanied by a return of the pulse, until we concluded that it was safe to place her back in bed. Imagine our distress to find that as soon as she was put in the horizontal position the breathing again ceased and the pulse disappeared, and she looked again the very picture of death. She was again and instantly placed

as before, so as to invite the blood to gravitate a second time to the brain, while efforts at artificial respiration were briskly kept up.

After a prolonged and most anxious interval we were again delighted by hearing a feeble spasmodic gasp, followed after another protracted interval by a second, then a third, etc., until the breathing finally became natural and the pulse returned. We laid her on the bed a second time, confident that it was now safe; but shortly after resuming the horizontal position there followed a spasmodic twitching of the muscles over the entire body, with a decided inclination to fall into a heavy sleep. Finding it difficult to keep her awake by mild means, we made stimulating applications along the entire spine, and put her feet into hot (almost scalding) water, which roused her sufficiently to make further treatment unnecessary. After anxiously watching and working with this patient for one hour and a half we were rewarded by seeing her restored to life, and at the expiration of four hours finding her able to ride in a buggy to her home, a distance of five miles.

I feel that I am simply stating a reasonable conclusion when I say that the life of this young woman was saved by practicing the method of M. Nélaton, and I do not believe that she could have been resuscitated by any other.

BIRMINGHAM, ALA.

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## QUININE ON THE PREGNANT UTERUS.

BY J. P. BONE, M. D.

Possibly in some of the cases where quinine has been regarded as determining uterine contractions a mere coincidence has been regarded as an effect. A case occurring in my practice will illustrate the assertion. I was called to see Mrs. W., who was supposed to be in the eighth month of her

first pregnancy, and who informed me that she had just had a very severe chill. Her pulse was 100 and full; and as she was living in a malarious district, and intermittent fever then quite prevalent, my conclusion was that she had this disease. I prescribed three grains of sulphate of quinia, to be taken every four hours, and left her, only to be recalled in ten or twelve hours, when I found her far advanced in the first stage of labor, with some rigidity of the os. In four hours more she gave birth to a large healthy child. The quinine was discontinued, and her recovery was prompt and complete.

I do not believe this is an isolated case. That which I mistook for ague, determined chiefly by the patient's statement, was one of the phenomena frequently incident to the first stage of labor, especially if there be rigidity of the os uteri. We are too apt to accept the statements of a patient as correct without finding out for ourselves by a careful investigation what the truth is; then where labor soon follows our prescription we attribute its occurrence to the medicine. Another source of error is in the uncertainty as to the date of conception. This event, it is conceded, is more likely to occur just prior or just subsequent to menstruation, but often we can not give precisely the time of this; and even then, if this is known, it may happen that should conception take place just before the flow usually happens, this flow fails, and hence an error of some weeks in fixing the expected date of parturition.

In the cases where abortions and premature labors have followed the exhibition of this agent would it not be more rational to attribute them to the disease for which it was administered? Until this question is conclusively answered in the negative I shall not hesitate to give quinia where indicated without reference to pregnancy, believing that at any rate a greater risk would be incurred by resorting to less reliable remedies than in the use of this specific.

## Reviews.

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**Contributions to the Annals of Medical Progress and Medical Education in the United States before and during the War of Independence.** By JOSEPH M. TONER, M. D. Washington: Government Printing-office. 1874.

Dr. Toner unquestionably belongs to the class of men framed by nature for writing history. He has the taste, the industry, the patience, and the impartiality essential to the historian, qualities which are found only now and then united in the same individual. He is a true lover of antiquity, and delights in rummaging among the musty records of the profession. In this contribution to our medical history, which we hope will be soon followed by others in the same line, he has gone back to the beginning, and collected a mass of biographical memoranda truly wonderful. The names of the physicians who came with the first colonists are recorded, with incidents in their lives illustrative of their characters and of the primitive condition of society and of the profession at that day. Altogether, it forms a most readable historical fragment, which every medical man curious in the early history of American medicine and proud of its advancement will wish to possess. We know not where else so much information on the subject could be found. The names, dates, and biographical sketches here accumulated constitute a store which will be of the greatest value to the future medical historian.

It is very evident, from Dr. Toner's account of things, that the division of labor, which we have found to be so favorable to progress, was not much observed by the early

colonial physicians. So far from this, the people seem rather to have preferred a doctor who was also a minister, mechanic, farmer, or merchant, or who united in himself a knowledge of all these callings, and was besides poet and legislator. Dr. Benj. Thompson, of Massachusetts, was a physician of note in Roxbury, and at the same time a school-master and poet of celebrity in his native town. Many divided their time between medicine and politics. Five physicians signed our declaration of independence; namely, Rush, Thornton, Hall, Bartlett, and Wolcott. Dr. John Pott was for a time at the head of the government in Virginia, and Beekman and Colden were successively governors of New York.

Quackery appears to have been an object of grave complaint and as bitter invective among our forefathers as it is with us. One of their writers said of the city of New York a century ago, "That place boasts the honor of above forty gentlemen of the faculty, and far the greatest part of them are mere pretenders to a profession of which they are entirely ignorant;" and another exclaimed, "The quacks abound as the locusts of Egypt!"

Dr. Toner reckons the number of practitioners in the colonies at the breaking out of our revolutionary war at thirty-five hundred, of whom he thinks not more than four hundred were graduates in medicine. Up to that period only two medical schools—one at Philadelphia, the other at New York—had been founded. The aggregate number of their graduates in a period of more than ten years was just fifty-one, including those who took the degree of bachelor of medicine. But now, according to Dr. Toner, there are over one hundred medical teaching bodies in the United States, and the annual list of graduates is over two thousand. Our population in the time has grown from less than four millions to some forty millions. No one can affirm then that the growth of medicine with us has not kept pace with our increase in population, rapid as that has been.



Not a few of the physicians who came from England to the colonies at an early day were men of note in the profession, writers known at home and scholars of high attainments, who soon gained great social and political influence in the new settlements. One of those was Dr. Wm. Cabell, of Virginia, whose fame has been perpetuated by his descendants. Dr. John Mitchell, a fellow of the Royal Society of England, was another. He wrote on botany as well as medicine, and contributed some interesting chapters to the early history of the colonies. Among his medical papers was an account of yellow fever, which was never published; but the manuscript, having fallen into the hands of Dr. Franklin, was transmitted by him to his friend, Dr. Rush. Dr. Mitchell gave the results of his experience with cathartics in the fever, the effect of which was at once to revolutionize the practice of Dr. Rush. The purgatives used by Dr. Mitchell were calomel and jalap; and Dr. Rush, in the midst of the epidemic of 1793, wrote in his diary, after making trial of the novel practice, "I have seen a hundred patients with the fever to-day, and, thank God, not one of them has died."

Dr. James Craik, whose descendants have also preserved his good name, enjoyed the enviable distinction of having been the personal friend of the Father of his Country and his medical attendant in his last illness. The acquaintance between the great soldier and his physician commenced in the army of General Braddock, with whom it is believed Dr. Craik came from Scotland to this country. Craik was present at the battle in which Braddock met his disastrous defeat, and dressed his wounds when the battle was over. He subsequently served with Washington through the war of independence, during which their acquaintance ripened into intimacy. Washington mentions him in his will as his compatriot in arms, his old and intimate friend.

Dr. Thomas Thacher, who came to New England in 1635, was one of that numerous class who were educated in both

theology and medicine, and made himself useful in both professions, though devoting his time chiefly to the ministry. To him belongs the honor of having made the first contribution to our medical literature. It is reproduced by Dr. Toner, and breathes the true spirit of philanthropy which has ever animated our profession. Its title is "A Brief Rule to guide the common people of New England how to order themselves and theirs in the Small Pocks or Measles." In concluding his paper he modestly remarks, "These things have I written, candid reader, not to inform the learned physician that hath much more cause to understand what pertains to this disease than I, but to give some light to those that have not such advantages, leaving the difficulty of this disease to the physician's art, wisdom, and faithfulness."

These hardy pioneers, notwithstanding the hardships to which practice in a new country exposed them, generally lived to be old. Dr. Cabell, for example, died at the age of eighty-seven; Dr. Craik at eighty-four; Dr. Thompson, the poet-physician, at seventy-two; Dr. Sprague at ninety; Dr. Jerauld at eighty; Dr. Cutter at eighty-five; Dr. Hitchcock, who was a preacher as well as a practitioner of medicine, and served fifty-five years as minister at Pembroke, at eighty-five; Dr. Dexter, for many years a professor in Harvard, at seventy-nine; Dr. Jas. Thacher, a graduate of both Harvard and Dartmouth, an antiquarian, and a miscellaneous and medical writer, at ninety; and Mrs. Ruth Barnaby, a noted midwife of Boston, at the advanced age of one hundred and one years.

The first person executed in Massachusetts Bay Colony was of our profession and a female—Mrs. Margaret Jones, physician and doctress, who was condemned to death for witchcraft. It appeared on examination, as related by Dr. Toner, "that she had such a malignant touch as many persons were taken with deafness or vomiting, or other violent pains or sickness; her medicines, though harmless in themselves,

yet had extraordinarily violent effects; that such as refused her medicines she would tell that they could never be healed, and accordingly their diseases and hurts continued with relapses against the ordinary course, and beyond the apprehension of all physicians and surgeons." Another doctress of Boston, who had the reputation of being a very skillful midwife, was banished from the colony "for agitating measures against the state." But times are happily changed, and the doctresses of New England and elsewhere may now pursue their calling and express their opinions without apprehension of banishment or being suspected of witchcraft.

Many of the colonial physicians took an active part in the legislation of their times, but for many years after the settlement of the country few laws were passed bearing upon our profession; and of these it is certainly not flattering to our professional vanity to find that the first enacted, in at least one of the colonies, was framed to protect the people against "the immoderate and excessive rates and prices exacted by practitioners in physic and chirurgery." The preamble to the law declares that through these "intolerable exactions the hearts of divers masters were hardened rather to suffer their servants to perish for want of fit means and applications than by seeking relief to fall into the hands of griping and avaricious men." The master, it is alleged, found it "more gainful and saving to stand to the hazard of their servants than to entertain the certain charge of a physician or chirurgeon, whose demands for the most part exceeded the purchase of the servant." The law was passed by the General Assembly of Virginia in 1639, and directs that the physician or surgeon shall be required, when his bill is disputed, to declare upon oath the true value and quantity of the drugs and medicines administered to the patient, whereupon the court should allow the satisfaction and reward it thought fit in the case. In an amendment to this act a few years later it was provided that graduates in universities might charge nearly twice as much

for their services as those who had only served an apprenticeship in medicine and surgery. This was a decided step in the direction of encouraging scientific medicine, but unfortunately, at a time when there was no university nearer than Leyden, very few students in America could become graduates.

In New York too, as well as in Virginia, there was some early legislation in regard to medicine. The Dutch Records of February 2, 1652, refer to a petition from the "the surgeons of New Amsterdam" praying "that none but they alone be allowed to shave," in answer to which it is stated the authorities ordered that none but barber-surgeons should shave for "gain;" but for the rest, they answered the petitioners, "The Director and Council understand that shaving doth not appertain exclusively to chirurgery, but is an appendix thereto; that no man can be prevented operating on himself nor to do another the friendly act, provided it be through courtesy and not for gain."

But our notice of these interesting primitive times in American medicine is growing too long, and we must check our pen. We close our article with an expression of hearty thanks to Dr. Toner for the pleasure we have derived from his admirable brochure. The feeling with which we lay it down is one of honest pride, as we contrast the medicine of our day with the medicine of which it gives the history; and we believe that the feelings of nearly all his readers will be the same. We commend the "Contributions" to the habitual croakers in the profession—to that limited class of critics who can see no progress in it, but fancy rather that matters pertaining to it are growing steadily worse. We ask them to look upon this picture of the profession of a former age, as drawn by the pen of a faithful historian, and on its present form and stature, as reflected by the medical books issuing from the press, the work of American physicians, by our current medical journals, and our hundred "medical

teaching bodies," and then declare whether there is not much in the advancement, both as to accuracy and breadth of science and precision and efficacy of art, to excite in all its members feelings of satisfaction, not to say of pride.

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**Diploteratology**, or a History of some of the most wonderful Human Beings that have ever lived in a double form. By H. BESSE, M. D. Delaware, Ohio: Gazette Steam Book and Job Office. 1874.

The author of this little book has collected together a number of these monstrosities, the history of which will be of great interest to a large class of readers. Besides presenting an account of these strange freaks of nature, he has attempted to assign the causes which led to their production. Whatever may be the judgment of the profession concerning his physiology, we have no doubt his labor in collecting these curious cases together in a shape easily accessible to all will be duly appreciated, and his book is pretty sure to attract much attention. It concludes with an account of the smallest human beings ever seen on our planet, and of Daniel Lambert, the largest. We thank Messrs. Robert Clarke & Co. for the opportunity of reading it.

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**Experimentation on Animals as a Means of Knowledge in Physiology, Pathology, and Practical Medicine.** By J. C. DALTON, M. D., Professor of Physiology in the College of Physicians and Surgeons, New York. New York: J. W. Christern, 77 University Place. 1875.

Of all the medical men in our country, Prof. Dalton is perhaps the best constituted for the defense of experimental physiology, having devoted more time both to the practice

and the reasons for it than any other American physician. His argument in its justification, embraced in this little volume of seventy pages, is conclusive. It could hardly be rendered more so than it stands in the several chapters on the character of this experimentation, its necessity, its results, the resolutions of medical societies sustaining it, and the testimony of distinguished men in its favor. Prof. Dalton has pursued the advice of Solomon, in answering not a fool according to his folly, but has set forth his case in a manner so calm, so convincing, that all clamor about the cruelty of vivisections must cease if men can be reached by reason. He shows that the pain spoken of in such experiments is really not experienced by the animals; that, on the contrary, it is an exceptional occurrence since the introduction of anæsthetics. A visitor, he says, might frequent the laboratory of a physiologist for a long time without hearing a cry or seeing a struggle, except while the animal is inhaling the ether.

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**Clinical Lectures on Various Important Diseases:** Being a Collection of the Clinical Lectures delivered in the Medical Wards of Mercy Hospital, Chicago. By NATHAN S. DAVIS, A. M., M. D., Professor of Principles and Practice of Medicine and Clinical Medicine in Chicago Medical College. Philadelphia: Henry C. Lea. 1874.

In a notice of the first edition of this work we spoke of it as a volume in every way creditable to its distinguished author. This the second edition having been enhanced in value by the addition of several new lectures and a remodeling of some of the old, we have even more pleasure than before in commending it to our readers as a book of genuine worth. There is a manifest improvement in the type and paper of the present volume, which bears the imprint of Mr. Lea, of Philadelphia.

## Clinic of the Month.

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DISEASE OF THE HEART A CAUSE OF ABORTION AND PREMATURE CONFINEMENT.—Under this head the *Lancet*, November 7th, remarks as follows:

“The connection which may exist between disease of the heart and pregnancy has within the last few years attracted the attention of some French medical men. In 1872 Dr. Michel Peter, in a clinical lecture published in *L'Union Médicale*, showed that very grave accidents might supervene in pregnant women affected with mitral insufficiency. Shortly after Dr. Ollivier, in various communications made to the *Société de Biologie*, and in a memoir published in the *Archives de Médecine*, proved that the pregnant condition might determine passing or permanent disturbance in the nutrition of the heart, and give rise to the production of certain chronic maladies of that organ. More recently (in October, 1873) M. Budin, house-surgeon to one of the Paris hospitals, published a case in the *Progrès Médical* which received much attention. It was that of a woman, aged forty years, affected with mitral insufficiency and dry pericarditis in the situation of the base, and attended by the phenomena of symptomatic angina pectoris. She had had seventeen child-births. In the first fourteen pregnancies the woman either reached the ninth month safely or miscarried in the course of the second month. Until she conceived for the fifteenth time she had never suffered from illness, never had an attack of articular rheumatism, never felt palpitation. Toward the sixth week of this fifteenth pregnancy she was affected with violent fits of suffocation, which were so very intense that she thought



every time she was going to die. Each of the fits was ushered in by cardiac palpitation. These attacks of dyspnœa increased in intensity until miscarriage took place, and then they ceased immediately. For the sixteenth time she became pregnant. Again the palpitation and dyspnœa made their appearance, and were even more frequent than before. The seventeenth pregnancy was marked by the same phenomena, and in both cases they disappeared only on occurrence of miscarriage. This event took place respectively at five months and a half and six months, the mother giving birth both times to a dead fetus. The last miscarriage took place in March, 1869. The beatings of the heart, which had been very violent during pregnancy, diminished considerably after miscarriage, though they did not cease entirely, when the husband was taken ill, and died in the month of April following. The heart symptoms then became more intense, and the woman entered the wards of *La Pitié*, where she stayed four months. Her health was almost entirely restored, when, in 1873, she was again taken ill and returned to the hospital for a few weeks. 'In presence of these facts and others which will be published hereafter,' wrote M. Budin, 'the question may be asked whether cardiac affections do not in turn exert a reciprocal action on the development of pregnancy, and whether in certain cases, doubtless of rare occurrence, they are not the cause of abortion and premature confinement.' Since then a certain number of new facts have confirmed the view thus expressed in the *Progrès Médicale*.

"In March, 1874, *La France Médicale* published the case of a woman who enjoyed good health until the age of thirty, and had three times been safely confined at term. She then began to suffer from palpitation, dyspnœa, etc., became twice pregnant, and miscarried both times at the third month of pregnancy. The cause of the heart-disease was stricture of the aorta. Still more recently a similar case was communicated to the *Société Anatomique* of Paris, and in the discus-

sion which followed Dr. Pinard related that during his house-surgeonship at the lying-in hospital he had observed two cases in which no cause had been discovered for the occurrence of premature child-birth but the existence of heart-disease.

“To the numerous causes of abortion and premature confinement indicated by classical writers it will be very likely necessary to add henceforth the one mentioned by M. Budin; namely, disease of the heart. Moreover, the expulsion of the fetus is but the consequence and, it may be said, occasionally the favorable termination of the grave accidents on which Dr. Peter has insisted in his lectures.”

RUPTURE OF THE PERINÆUM.—Olshausen states as predisposing causes of this accident: 1. On the part of the mother: insufficient curvature of the posterior plane of the excavation; narrowing of the pubic arch; resistance; thinning or œdema of the perinæum. 2. On the part of the fetus: occipito-posterior positions and face presentations. M. Lauth recounts the prophylactic means. He advises not forgetting lateral decubitus and perineal support. He especially commends the method of Hohl, advised by Joulin; viz., pushing back the head with the fingers of the left hand, while the right sustains the perinæum. Other means are division of the constrictor in vulvar narrowing; pressure upon the head, to favor its disengagement, by two fingers in the rectum, as advised by Smellie; and finally disarticulation of the forceps (Stoltz) when the head is at the vulva. When rupture occurs he advocates primary operation. To these statements of Olshausen we may add that the rent may occur in delivery of the shoulders; that chloroform is of great value in preventing the accident, and that an immediate operation is not advisable if the recto-vaginal wall be involved; that superficial ruptures heal readily without sutures, and that other than these two varieties usually unite readily if *serres fines* are used. (*Gazette Obstétricale de Paris.*)

TREATMENT OF CATARRHAL JAUNDICE BY ELECTRICITY.—Dr. Gerhardt, of Berlin, first determines the position of the gall-bladder by percussion at the free border of the liver. This can often be detected by a small rounded prominence at the inferior convexity of the liver, and can be easily made to project. The electrode of a strong inductive electric machine is applied at this point, while the other electrode is applied at the other side of the median abdominal line. Almost always, when the current is powerful, a gurgling sound can be heard, and very often the fæces resume their natural color, and the cure is effected. (*Ber. Klin. Wochenschr.*—New York Medical Journal).

POWDER FOR PREVENTING THE CICATRIZATION OF SMALL-POX PUSTULES.—Dr. Pennavaria, of Sicily, recommends a powder composed of four parts of flowers of sulphur and one of red precipitate for preventing the cicatrization of small-pox pustules on the face. He was induced to use the powder for this purpose from having found it extremely useful in many cutaneous diseases, especially eczema and acne. In using it a drop of glycerine is placed on the pustules and the powder sprinkled over this. The crust becomes detached in a few days, leaving the skin intact, without even a stain. (*Gaz. Med. Ital.*—*Ibid.*)

LIME GLYCERINE FOR BURNS.—This remedy is as follows: oxidi calc., 3 parts; glycerin., 150 parts; spts. æther, chlor., 3 parts. This preparation has been used by Laub for several years with great success. Charpie is to be dipped in the mixture and placed over the burned surface; it is then covered with a thin sheet of gutta-percha, and then a layer of charpie is added, the whole to be surrounded with a loose bandage. It is very important that the charpie should be closely applied to the burned surface. The pain ceases almost instantly, and the sore heals very rapidly. (*Nordiskt Med. Archiv.*—*Ibid.*)

CEREBRAL RHEUMATISM.—In an article on this subject, in the American Journal of Medical Sciences, by Prof. DaCosta, he discusses it as a separate and perfectly well-defined morbid condition, and illustrates by cases certain readily-recognizable differences in its clinical manifestations. The following is Prof. DaC.'s general description of the affection:

“In the course of acute rheumatic fever, usually after it has existed for some time, or even after convalescence and among the first signs of a relapse, appear symptoms of cerebral disorder, manifesting themselves chiefly by restlessness, passing into stupor or coma, or becoming associated with delirium. The former combination is less common than the latter, and of much shorter duration. The delirium is preceded by wakeful, dreamy nights, is generally mild, and it is during the restless nights that it shows itself most plainly. Though it may be a continuous it is scarcely ever a fierce delirium, and is not, as a very general rule, linked either to headache, injected eye, or vomiting. It may run a rapid course, delirium or stupor quickly ending in coma, coma in death. But ordinarily it goes on for days, the patient gradually mending or becoming weaker and weaker, and passing perhaps into a condition very similar to that of typhoid fever, excepting that the bowels are constipated. The likeness to the enteric fever is heightened by the presence of sordes on the teeth and the appearance of an eruption. The temperature is apt to be high, the joint-affection persistent, or even showing signs of increase; the breathing is rapid; the pulse frequent, compressible, and at times irregular. A cardiac difficulty may show itself distinctly as a complication, or again be wholly wanting. In some cases convulsions, in others local palsies happen, or we may have hemiplegia even suddenly developed. But these features are rare, and it is in the wakefulness and restlessness, in the stupor and delirium, that we mostly find the signs of how decidedly the brain has become disordered.”

The *temperature* of the body in cerebral rheumatism is stated as a rule to be high, "and the decided rise precedes the manifestation of the cerebral symptoms. Usually—and the record of a number of the cases in this paper proves it—after the temperature has attained to full febrile heat it remains so without great variations, except a morning remission of about one degree, or oftener of less, until the disorder gradually terminates, or until just before death the animal heat rises considerably. Sometimes, where it is very high, it falls several degrees as a favorable indication. On the other hand, a fresh joint-affection of decided character changes the even markings. In other words, in this respect cerebral rheumatism acts very much as rheumatism of any of the other internal organs. I have studied this matter carefully with reference to endocarditis, and partially with reference to pericarditis, and I have been struck with how comparatively little the thermometric record fluctuates during the internal inflammation, in fact less than during the ordinary course of rheumatic fever; and decided fluctuations are very apt to be due to fresh rheumatic attacks of the joints or other parts. This general law I find for the most part reproduced in the study of my cases of cerebral rheumatism. But how is it with regard to the extreme temperature which is supposed to characterize cerebral rheumatism, so to characterize it that it has almost become the doctrine of the day that hyperpyrexia in acute rheumatism and brain symptoms are synonymous? The observations in this paper negative the necessary connection. True, high temperature is found, but very often it is a mere result immediately preceding death, and not witnessed during the height of the malady, and while the struggle for life is still going on. In one of my cases, while the cerebral trouble was at its height, the thermometer did not rise above  $102^{\circ}$ ; nor did it at any time, unless perhaps just before death, when it was not taken. In another case the extraordinarily high temperature of  $110^{\circ}$  was reached—the

highest that, so far as I am able to find, has been recorded as having been reached in any case of any kind of illness that ended in recovery—yet there was not a cerebral symptom from beginning to end.”

Dr. DaC. denies that the disease is a metastasis, and leaving out the instances of real rheumatic meningitis, which is an excessively rare lesion, he thinks “the true pathology of the cerebral disorder is to be sought in the action of the rheumatic poison on the brain, whether it does so directly or indirectly, through the changed composition of the blood or by both concurring. To these elements is often added an altered condition of the finer vessels of the brain; in other words, the rheumatic poison may fasten upon the lining coat of these as it does upon the endocardium, and, favored by the altered condition of the blood, lead to plugging. Occasionally it may be an embolus washed from the heart into the cerebral vessels that occasions the circulatory disorder, but more usually it is a thrombus there formed; and if in any case there be not actual obstruction, there is still circulation of altered blood, which moreover is apt to be still more vitiated by the impaired action of the kidneys, itself another expression of the rheumatic poison seizing upon an internal organ. The common condition of the brain-tissue in cerebral rheumatism is that of nutrition interfered with and of anæmia, and where rheumatic endocarditis and pericarditis co-exist this may show itself all the more quickly. Where the rheumatic poison, directly or through the altered blood, acts on the nerve-centers regulating temperature hyperpyrexia results; but I have already stated my conviction that the importance of this as explaining cerebral rheumatism has been greatly overstated.

“The *prognosis* in cases at all marked is always a grave and generally an unfavorable one, especially so in those presenting evidence of kidney-change, or in which the temperature is very high and the fever of a typhoid kind. The

palsies that happen are not as serious as might be supposed; they are usually transitory, and end in recovery.

"In determining the *treatment* we ought to lay great stress on what we can ascertain to be the exact cause of the disturbance. Rheumatic meningitis is best treated by leeching, by the bromides, by active purgation, by the alkalies, and by the iodides; but in the majority of instances of rheumatism of the brain, as we have cerebral anæmia, these remedies are either forbidden or are not available. Opium and chloral may be employed for the delirium and restlessness; quinia in tonic doses, food, stimulants for the relief of the typhoid symptoms; while in all cases we should pay the strictest attention to the action of the skin and of the kidneys. Moreover, the cardiac symptoms must be closely watched, and the action of the heart sustained; and this is often best done by digitalis. Where we can, the treatment for the rheumatic symptoms must be continued, and in a form that shall not be depressant; hence I do not think the bromides ought as a rule to be employed, which I did for a time until I understood the meaning of the cerebral symptoms better. Where there is any sign of retrocession from the joints—which, however, is the rare exception—we may blister them."

Dr. DaC. concludes his exceedingly valuable paper by a reference to the great value of stimulants in these cases, and says that in looking back he regrets that he did not sometimes employ them more freely.

SPLenic LEUKÆMIA TREATED BY HYPODERMIC ERGOTINE.—Prof. DaCosta reports (*ibid.*) two cases of splenic leukæmia, in which very striking results followed the use of ergotine hypodermically. The treatment in one case is thus described: A hypodermic injection, on alternate days, of five grains of ergotine in glycerine and water, also internally twenty drops of chloride of iron thrice daily. The first injection was of one grain of ergotine, but the subsequent applications were



of the strength prescribed above. The first two injections were made over the splenic region, the third injection and all the other ones were into the subcutaneous tissue of the left arm. On October 16th, after two injections had been made, the patient said that he felt better, and the splenic diameters were found to be less. An observation on the 20th, after five injections, records that the pupils are not dilated by ergotine; that there are no ulcers at former points of insertion, but in each case a trifling circumscribed slough of the skin. The temperature before the injection was  $100.3^{\circ}$ ; after the same. The temperature on several occasions showed a slight rise after the injection, but not of more than half a degree. October 21st, after six injections, the patient enthusiastically volunteered the information that he felt splendidly, and the size of the spleen was observed to have much diminished. October 22d, after seven injections, the spleen was percussed and found not extending to the lower rim of the ribs. Very marked improvement in the patient's appearance was manifest, and he said that he had not felt so well for a year. October 29th, after eight injections, the color of the face, lips, and tongue was almost normal, the appetite had greatly improved, the pain in the left side was gone. A microscopical examination of the blood, made by the first clinical assistant, Dr. James Wilson, showed the relative number of the white corpuscles to have become nearly normal, being fourteen in the patient's case as compared with twelve in the blood of a perfectly healthy person. Percussion of spleen gave a dullness of only three and three fourths inches in the vertical diameter, the transverse diameter beginning on a line with the middle of the axilla; the temperature was normal. The patient was now dismissed as cured after being enjoined to continue the use of the iron.

THE USE OF MERCURY IN THE LATE STAGES OF SYPHILIS.—  
Dr. Sturgis, of New York, whose writings on venereal diseases

entitle him to rank among the authorities in these matters, states (*ibid.*) that he has seen so many cases of chronic syphilis which, after improving under the iodide of potassium up to a certain point, finally required mercury in some form to cure, that he has come to regard the iodide as the *adjuvant* and *not* as the principal agent in the treatment. We are entirely of the same opinion. In the two examples of advanced syphilis reported in Dr. S.'s paper the iodide was used alone; and although it unquestionably did improve the condition of the patients, it did not go far enough to produce a radical cure, nor did it prevent relapses, in the one case during the treatment, and in the other in six months after the iodide had been omitted. And another feature is noticeable: the instant mercury was used improvement was much more rapid than it had been where none had been employed.

"The form and manner of giving the mineral is not an unimportant matter. My favorite method of giving mercury is by inunction, and the usual objections made to its use in this way may be obviated by using it to the soles of the feet, and wearing the same stockings night and day. In that way the soiling of the linen may be prevented. One of the neatest preparations of mercury I have ever used is the oleate of the twenty-per-cent strength, either with or without morphia. This is given in from half a drachm to drachm doses, externally, at night. The absorption is much more rapid than is the case with the ordinary ointment. It is a much cleaner preparation, and, acting more forcibly, less of it is required. In speaking thus of inunction I do not intend to do injustice to the other means at our disposal, such as the mercurial vapor-bath, nor the internal treatment. All have their appropriate seasons of use, but of them all the inunction method seems to me the one least open to objection, and one which in the long run will give the most satisfaction. The only preparation against which I acknowledge prejudice is the bichloride. In my hands it has been liable to produce the

toxic before it does the therapeutic action, and it does not admit of the free use which other and milder preparations do. The only other mode of administration which I have left unmentioned is the hypodermic one. It is objectionable in several ways, and not the least of them is the attendant pain notwithstanding the use of morphia with the injection."

ANEURISM OF THE ABDOMINAL AORTA TREATED BY IODIDE OF POTASSIUM.—A successful case of this kind is reported (*ibid.*) by Dr. Mathews, of Texas. The aneurism was detected in April, 1874, and extended from under the sternum obliquely downward to below the umbilicus. The patient was ordered twelve and a half grains of iodide potassium in syrup of sarsaparilla three times daily, and this was gradually increased to a drachm in the course of the twenty-four hours. He says, "My patient began at once to improve. The large doses seemed at first to irritate the stomach a little, but this soon passed away. When I began the use of the remedy the lady was confined closely to her bed, could not sleep unless under the influence of chloral. Now five months have passed; she is able to be up nearly all the while; sleeps without the soporific; rides about, even on horseback, a good deal, and is apparently in very good health. The aneurismal thrill and the bruit once so distinct are nearly absent, though the remains of the 'sac' can be distinctly felt, yet very much smaller than it was at first. I used nothing but the iodide of potassium, except during June, when I gave between the iodide doses of one drachm of flu. ext. ergot and five drops of tr. digitalis. I have kept up the use of the iodide steadily till now, except for two weeks. At present I am giving five grains of iodide potassium and three grains of carbonate of ammonia three times a day."

ESMARCH'S BLOODLESS METHOD.—Professor H. B. Sands, of New York, contributes to the January number of the

New York Journal of Medicine a valuable paper, based on an analysis of sixty-three amputations, from which we make the following abstract:

"The bandage should be soft and highly elastic, and the constriction of the limb should be made either by a piece of the same material, or, where this would be too wide, by a piece of soft rubber-tube. The solid cord should, I think, be abandoned, as likely to do mischief. In applying the constricting band much less force is needed than is commonly imagined, and with every additional turn the effect is considerably increased. Finally, the operation ought not to be needlessly prolonged. It is not easy to determine, however, for what length of time the state of artificial anæmia may be maintained with impunity. Doubtless, however, the danger increases with the length of time the pressure is continued; and in amputations, which are shown to be the operations most likely to be followed by gangrene, the bandage need not be kept on longer than five or ten minutes. As bearing on the question of the cause of sloughing after the use of the elastic bandage, it may be well to bear in mind that, with a single exception, sloughing occurred only in amputations. I have been unable to discover any failure or imperfection in the reparative process which could be ascribed to the method employed. The wounds have presented the ordinary character, and many of them have healed by the first intention. I am disposed to dismiss as invalid the assertion that the method predisposes to the occurrence of hemorrhage."

One case of paralysis and one of neuralgic pains, continuing for two weeks, are, it is stated, "the only cases in which nerve-symptoms followed the employment of the bloodless method, and there can be no doubt that the mischief was caused by the undue pressure of the constricting cord. Langenbeck has reported three cases of paralysis of the median nerve due to the same cause, and he suggests that an elastic bandage be used as a means of constriction instead of the tubing or solid

cord. This suggestion is a practical one, and its adoption will, it is to be hoped, prevent a repetition of the accident referred to. We have no facts to enable us to prove the danger of rupture of the blood-vessels from the pressure of the constricting-cord, and it seems probable that such danger is no greater than when the tourniquet is employed. Finally, the caution which has been urged against the application of the elastic bandage over gangrenous parts, or over those which are the source of putrid discharges, is undoubtedly a wise one, and, so far as I can learn, has generally been observed by operating surgeons.

“Enough has been said to prove that Esmarch’s bloodless method is one of the most valuable surgical expedients that have been devised in modern times. It only remains now to determine the best mode and the proper range of its application.”

ACIDULATED GARGLES IN TYPHOID FEVER.—Dr. Netter, of Paris, directs attention to this class of medicines in the following conclusions:

1. Call the attention of the patients to the bad odor of their mouth, and inform them that not only in it but also in the nose there is something being secreted which poisons the whole system.

2. Place at their disposition an unlimited quantity of a solution containing two hundred grammes of decoction of barley, thirty grammes of honey, and twenty-five grammes of vinegar. Let them gargle and rinse their mouth with this frequently, and also snuff it into both nostrils. When they have commenced with this it will be found so agreeable that large quantities will be consumed.

3. The nurses should be instructed to encourage and assist the patients during this operation. Where the adynamia is very profound the nurses should cleanse the mouth for the patients. (New York Medical Journal.)

TREATMENT OF CHRONIC ULCERS OF THE LEG.—For the treatment of these ulcers, which are of such frequent occurrence among the poorer classes, Dr. Bidder recommends the starch-bandage. The ulcer and leg, having been cleaned, are covered with a layer of wadding, and then the limb is enveloped in a starch-bandage. After the dressing has dried the patient can follow his occupation. After from five to eight days the dressing is removed and renewed. If the ulcer has callous edges, it is best to strap it first. After treatment of several months in the above manner the author has cured large and very chronic ulcers. (*Ibid.*)

ON THE TREATMENT OF DIARRHEA OF TYPHOID FEVER.—In a clinical lecture on this subject by Dr. George Johnson, of King's College Hospital, he says:

"I have gradually arrived at the conclusion that in the treatment of typhoid fever careful nursing and feeding are of primary importance, while as a rule no medicines of any kind are required, and when not required they are often worse than useless. The result of this change of treatment has been that diarrhea is a less frequent symptom than formerly, and when it does occur it is far more tractable, while tympanitic distension of the abdomen is a rare event. The mischievous opiate enemata and the torturing turpentine stupes have disappeared together. I believe that one of the main reasons why we have less diarrhea than formerly is that we carefully abstain from the employment of irritating drugs of all kinds. As a rule, a fever patient has the 'yellow mixture,' which is simply colored water; and except an occasional dose of chloral to procure sleep, and a tonic during convalescence, we give no active medicines of any kind. We feed these patients mainly with milk, with the addition of beef-tea and two raw eggs in the twenty-four hours, and we give wine or brandy in quantities varying according to the urgency of the symptoms of exhaustion, especially in the advanced stages of the



disease; but in many of the milder cases, and especially in the case of children, we find that no alcoholic stimulants are required from the beginning to the end of the fever, and when not required they are of course best withheld. I have said that we give no irritating drugs of any kind. For a time I adopted the practice, which has been strongly recommended, of giving repeated doses of diluted mineral acids. I have long since abandoned this practice, for I am sure that it was injurious, and it was injurious in a very obvious and intelligible way; it irritated the ulcerated mucous membrane of the intestines; it caused pain and griping; and I believe that it often increased the diarrhea. I have no doubt that the comparative infrequency of severe and obstinate diarrhea among my enteric-fever patients during the last few years is partly attributable to the discontinuance of this mineral-acid treatment.

“The diarrhea of typhoid fever is in all probability often increased by the patient’s inability to digest the beef-tea and eggs, which are sometimes too abundantly given. When you have reason to suspect that this may be the case I advise you for a few days to keep the patient entirely upon milk, which contains all the elements required for the nutrition of the tissues in a form most easy of digestion. Milk has an anti-laxative and even constipating effect in various morbid states, and is when given alone one of the best antidotes for the diarrhea of typhoid fever.”

TREATMENT OF ABSCESS OF THE CORNEA BY THE APPLICATION OF FRICTION AND THE VAPOR OF HOT WATER.—Dr. Osio remarks that in the treatment of some obstinate affections simple but very efficacious remedies are often despised. Abscess of the cornea may arise from injury, or from constitutional disorder usually associated with great debility. In the course of a few days, without pain or lachrymation, and almost without any injection of the tissues of the eye, pus



appears in the lamellæ of the cornea. After a short time it bursts through Descemet's membrane and forms a large hypopyon, often leading to loss of the eye. In such cases Dr. O. applies the vapor of water, at a temperature of 100° F. or more, directly to the eyes by means of a little apparatus, and then rubs the cornea through the closed lids with a linen handkerchief, circularly, for one or two minutes. The vapor douche should last for half an hour or more, and the rubbing repeated eight or ten times in that space of time; then a drop of atropine solution should be instilled and a compress applied. General sustentation and tonic treatment is also of course necessary. (*Independencia Medica de Barcelona.*)

THE ORIGIN OF SCIRRHUS.—S. Wolfberg, of Erlangen, has satisfied himself that scirrhous of the breast originates in the epithelium, either of the alveoli of the gland or of the excretory ducts; the former epithelium presenting the glandular, the latter the columnar form. The connective tissue of the gland participates under very various forms in the growth of the tumor, but the endothelium of the lymphatics is not implicated. (Virchow's Archive.)

HORSE-HAIR FOR SUTURES.—Dr. Fayrer, in his "Clinical Observations in India," remarks that a well-selected white hair out of a horse's tail is in many respects better than any suture hitherto devised. That from the tail of a white or gray horse is the best. He can not tell why it should be so, but he finds the white better than the black hair. The matter, he says, may appear a trifle, but is nevertheless an important trifle; for if the alleged inconvenience and even danger from suppuration from the hemp and silk ligature, or the disadvantages of the wire, can be avoided, the subject is sufficiently interesting to be worthy of consideration. (Practitioner.)

## Notes and Queries.

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STYPTIC COTTON.—The *Annales Gynécologie* of July, 1874, contains a letter from Dr. M. A. Pallen, whom the editor terms *un de nos confrères très-distingués de l'étranger*, stating that he has been using styptic cotton for more than eight years (the invention of which, it seems, has been attributed to Howitz, of Copenhagen), prepared in a manner similar to that of Howitz. Dr. Pallen, without wishing to insist upon his "priority in the application of this hæmostatic," mentions his long experience "*de son efficacité et de ses heureux résultats.*" It is to be regretted that Dr. Pallen did not make known his valuable invention at an earlier day.

FOREIGN VIEW OF THE NORWICH VIVISECTION TRIAL.—The *Lancet* of December 26th contains the following: "The French medical press have freely commented on this trial, and the writers maintain that the British Society for Preventing Cruelty to Animals has needlessly gone out of its way to display a maudlin sympathy where none was needed. Dr. Magnan had performed the same experiments at Lyons at the time of the Congress, and they proved highly interesting, the scientific aim held in view being approved by all the lookers-on. The French writers point out with much emphasis that a sister society exists in France, but that it has contrived to escape the quicksands of over-sensitiveness. They complacently dilate upon Sir James Paget's rebuke to sportsmen, who remorselessly inflict terrible pain and agony upon animals. But they find fault with Dr. Ferrier, who, alluding to the cruel experiments of an American physi-

ologist upon an unfortunate woman whose diseased cranium left a portion of the cerebrum open to inspection, stated that the results obtained in the States exactly corresponded to those he had observed in his experiments upon monkeys, dogs, and rabbits. Dr. Ferrier thus showed that a perfect homology exists between the human brain and that of monkeys, dogs, and other mammalia. But the English physician, says the French writer, did not find a word of blame for the wanton cruelty to the woman who eventually died after much suffering."

ERICHSEN'S IMPRESSIONS OF AMERICAN SURGERY.—When Professor Erichsen returned home after a brief visit to this country he delivered an address full of generous acknowledgments of kindnesses received, and containing some things concerning the profession here quite at variance with the utterances on the same subject of certain portions of our own medical press. The illustrious Englishman says:

"Surgery in the United States certainly stands at a very high level of excellence. The hospital surgeons throughout the country have struck me as being alike practical, progressive, and learned in a very high degree. In practical skill and aptitude for mechanical appliances of all kinds they are certainly excelled by no class of practitioners in any country. They are thoroughly up to modern surgery in its most progressive forms, and I have never met with any class of men who are so well read and so perfectly acquainted with all that is done in their profession outside their own country. It would be a great injustice to American surgeons for it to be supposed that surgical skill is confined to the large cities or to the few. On the contrary, I know no country in which, so far as it is possible to judge from contemporary medical literature, there is so widely diffused a high standard of operative skill as in the country districts and more remote provinces of the United States. The bent of the mind of the American

surgeon is, like ours, practical rather than scientific; in fact, there are the same mental characteristics displayed in him that we find here; the same self-reliance, the same practical aptitude, the same *curative* instinct, which leads him to consider his patient rather as a human being to be rescued from the effects of disease or injury than as a scientific object to be studied for the advance of professional knowledge. . . .

“The hospitals in the United States are, as with us, supported by voluntary contributions or by endowments from wealthy benefactors. The Americans are munificent in their charity, and hence these institutions are numerous and well organized. America has two sets of hospitals, the old and the new. Like England in some of its larger towns, it is still embarrassed by the hospitals erected in pre-sanitary days under systems of construction which time, experience, and the advance of scientific knowledge have proved to be erroneous, in which septic diseases are readily generated and become largely destructive to the patients. These institutions are, however, undergoing a process of conversion which will speedily do away with many of the evils inseparably connected with such buildings. The Americans learned a hard lesson in the deadly struggle of the war of secession; a lesson which is not likely soon, if ever, to be forgotten by so practical a people, unfettered by old prejudices and preconceived opinions. The lesson to which I allude is this: that wounded and injured soldiers could only safely be treated in the open air, in hut, or barrack hospitals. This lesson has been taught to Europe by the more recent experiences of the Franco-German war, with what results in the future remains yet to be seen. That the barrack or hut system is superior to any other for surgical cases there can be no question. . . .

“At the Roosevelt Hospital in New York, without exception the most complete medical charity in every respect that I have ever seen—a hospital the construction of which reflects the greatest credit upon its designers—in this hospital, which

is constructed on the plan of a central administrative department, with lateral pavilions, there is a large detached barrack-ward erected in the garden having no communication with the general structure except through an open corridor. This barrack-building or ward is devoted solely to the reception of acute surgical cases. It consists mainly of one large ward containing thirty-six beds, arranged two-and-two on either side in the interspaces between the windows. It has an open basement and a large ventilating space between the ceiling and the roof; and every appliance that modern science can suggest in the way of securing efficient ventilation, cleanliness, and warmth has been expended upon it. This ward, filled with surgical cases, has now been opened for nearly three years; and I was told by Dr. Weir, who kindly took me over it, that during that time there had only been one case which was supposed to be pyæmic; a case of so-called 'pyæmic meningitis' following urethrotomy, anyway a case of blood-poisoning probably rather from self-infection than from external contamination. In addition to this magnificent barrack-ward, there is in the gardens attached to the Roosevelt Hospital a separate hut for the reception of erysipelas cases that may be brought to, or might accidentally develop in, the institution. The Roosevelt Hospital appears to me to be a model that might with great advantage be copied in this country, especially in those towns where it is becoming necessary to destroy pyæmia-infected infirmaries, and to construct new hospitals. It is a perfect model for a hospital of from one hundred and fifty to two hundred and fifty beds, and the plan admits of its indefinite augmentation by the addition of pavilion wings and barrack-wards.

"But admirable as this institution is, an attempt has already been made to improve upon it. The American surgeon, as I have already told you, is progressive. He invariably tries to go from good to better. He will not remain content with those appliances and means which might have been sufficient

for a past generation, but are no longer equal to the requirements of the present day. Dr. Billings, of the United States army, one of the most learned and advanced surgeons of the day, is superintending the construction of a hospital at the 'Soldiers' Home,' near Washington, a magnificent establishment, the Chelsea of America. There is no barrack or hut attached to this hospital, as it is intended for chronic cases only; but, should occasion require, such a building might easily and cheaply be run up in connection with it. . . .

"In all the modern hospitals that I have visited in the United States I have been particularly struck with the extreme attention to cleanliness in all that concerns baths, lavatories, and water-closets. These appliances are as perfect as they are substantial, and as ornate as are to be found in the best private houses. They are invariably carefully isolated from the wards. Great attention is also bestowed upon the disposal of foul linen, which as a rule, instead of being carried through the building, is conveyed directly from the ward down a separate lift in the central department. The laundries also are models of cleanliness, and generally detached from the main building. The whole of the washing of the clothes, drying, etc., is rapidly done by steam machinery. Hot-air chambers are also provided for the rapid drying of damp ward-linen. The floors are of hard wood, and are dry-rubbed. Fire-proof staircases and hydrants having a continuous water-supply are ready in case of emergency. In many hospitals there are spacious wooden piazzas or verandas running round the building, and communicating directly with the wards, for air and exercise in summer. . . .

"Surgical practice in America does not differ in any very essential respects from that adopted here. There are necessarily some modifications and many ingenious appliances, but essentially there is no greater difference between American and English surgery generally than is to be found between the practice adopted in any two London hospitals.

"The treatment of wounds is sufficiently simple, and presents nothing peculiar. I observe that American surgeons are careful about the drainage of wounds, and employ drainage-tubes or similar appliances freely. . . .

"I have thus given you a very brief sketch of some of the impressions that I formed of our profession during my recent visit to America, and in so doing I have purposely, as far as possible, omitted mentioning the names of American surgeons, because I felt that there are so many so highly distinguished that it would be invidious and perhaps unjust to make a selection of a few among the juniors, and among the seniors it would be needless to name to you such men as that Nestor of American surgery, Gross, or of Pancoast, of Philadelphia; of Van Buren, Wood, Parker, or Sayre, of New York; Bigelow or Hodges, of Boston; Smith or Johnston, of Baltimore. I can only say that the surgical profession in America contains a phalanx of men alike distinguished for their skill and their knowledge at least equaling what any European country can produce. And, in conclusion, I would advise those among you who wish to see and study the practice of surgery elsewhere than in the school in which you have been brought up in this country, who are not content throughout their lives, *jurare in verba magistri*, to run in the one professional groove in which they have been launched, but who unfortunately have not acquired that fluency of the speech of Germany or France that would render a residence in those countries profitable for the purposes of study, to take a trip across the Atlantic—a voyage in itself interesting, amusing, and health-giving—and to spend a few months in visiting the great hospitals and schools in the cities of the United States of America."

MCDOWELL MEDICAL SOCIETY.—The second semi-annual session of the McDowell Medical Society was held at Madisonville, Ky., Wednesday, November 4, 1874, President J. B.



Cook, of Henderson, presiding. The meeting was opened with prayer by the Rev. Mr. Boggus, of the Methodist Church, after which Dr. J. W. Pritchell, chairman of the Committee of Arrangements, tendered the members of the society a cordial welcome.

Upon recommendation of the Committee on Credentials there were fourteen new members elected, the three following gentlemen being elected honorary members: Professor W. T. Briggs, of Nashville, Tenn.; Dr. Ely McClellan, of the United States army; and Dr. Lewis Rogers, of Louisville.

A union of the McDowell Medical Society and the Green River District Medical Society was effected, the societies to be known as the McDowell Medical Society; and Dr. H. C. Wood, of Owensboro, president of the Green River association, to preside at the next meeting, when new officers are to be elected.

Dr. James H. Letcher, of Henderson, appointed to read a biography of Dr. Ephraim McDowell, made a report. Dr. Ely McClellan, of the United States army, entertained the society with a graphic account of the travels of cholera in the United States in 1873, its portability, etc.

The following papers were read: Dr. Luckett, of Owensboro, on "Epidemic Cerebro-spinal Meningitis;" Dr. J. H. Moore, of Madisonville, on "Consumption;" Dr. J. D. Collins, of Henderson, on "Longitudinal Cervical Elongation of the Uterus—Operation with the Elastic Ligature;" Dr. Jos. W. Thompson, of Paducah, on "The Use of Mercury in Syphilis;" Dr. Robert Stewart, of Zion, on "Public Hygiene."

In the evening Prof. W. T. Briggs, M. D., of Nashville, Tenn., delivered an interesting lecture.

Drs. O. L. Drake, J. Hale, A. C. Wood, J. L. Cook, J. H. Letcher, J. W. Pritchell, W. A. Jones, and Geo. Pendleton were appointed delegates to the American Medical Association.

The following were appointed delegates to the Kentucky State Medical Society, which convenes at Henderson next

April: Drs. Hobbs, J. T. Soyars, S. C. Smith, J. D. Collins, Thos. W. Taylor, Thos. E. Powell, R. M. Farleigh, and L. H. Robinson.

The following chairmen of committees were appointed:

Committee of Arrangements, Dr. Geo. Pendleton; Committee on Obstetrics, Dr. O. L. Drake; Committee on Improvements in Practical Medicine, Dr. Ben Letcher; Committee on Improvements in Surgery, Dr. P. Thompson; Committee on Hygiene, Dr. T. H. Lockett; Committee on Medical Ethics, Dr. J. A. Hodge; Committee on Finance, Dr. Thos. W. Taylor; Committee on Epidemics, Dr. T. H. Moore; Committee on Rational Medicine, Dr. J. Hale; Committee on Syphilis, Dr. Jas. H. Letcher.

The Society adjourned to meet the first Tuesday in June, 1875, at Hartford, Ky.

COLD AS INFLUENCING MORTALITY.—The effect of cold in swelling the mortality among aged people has been long a subject of remark by medical observers. An illustration of this influence was afforded by the late cold term in this city. On the 8th of January the temperature late in the evening was 34°; next morning the thermometer had fallen to eight degrees below zero. The suddenness of the decline took people by surprise, and great numbers had their toes and fingers frostbitten. On the succeeding morning the mercury was only one degree above zero, and during the week following it ranged from two to eighteen degrees. The mortuary report for the week exhibited eleven deaths in persons over sixty years of age in a mortality of fifty-seven. Of these three were between sixty and seventy, four between seventy and eighty, and four between eighty and ninety. The table gives twelve deaths from pneumonia during the week. Contrary to the rule, the mortality among the blacks this week, for some cause, was less than the average proportion, or only twelve to forty-five, when usually it is about one to three. The mortuary report for the week ending January 23d shows

that of sixty-three deaths in the city eighteen occurred in persons over fifty years of age, or, deducting four still-born children, nearly one third of the whole. Five were over fifty, five over sixty, three over seventy, four over eighty, and one over ninety years. The weather was cold throughout the week.

DEATH OF DR. CALDWELL.—Dr. Thos. Leaming Caldwell, for nearly forty years a practicing physician of Louisville, died near this city on the morning of the 20th of January. He was the only son of the late Dr. Charles Caldwell. His mother was a gifted and highly cultivated lady, the daughter of Thomas Leaming, of Philadelphia. He was educated at Harvard, and took his medical degree at Transylvania. Shortly after graduating, in 1836, he came to this city, where he has since constantly resided, except during the years of the Mexican war, when he was surgeon of the Louisville Legion, under Colonel Ormsby. He was long connected with the Louisville Marine Hospital as visiting or consulting surgeon, and for a number of years was a private teacher of medicine. He had the manners and many of the mental qualities that characterized his distinguished father, and was greatly admired by his pupils. His memory had been failing him for some years, which compelled him to relinquish his practice, and his last days were passed in retirement at the home of a relative near the city. He was a fine scholar, and a gentleman of cultivated and elegant tastes.

DEATH OF DR. J. C. HARRIS.—Dr. James Crawford Harris, known to the readers of the *American Practitioner* as a writer on the climate and diseases of the South, died suddenly of apoplexy, at his residence in Wetumpka, Ala., on the 4th of January, in the sixty-third year of his age. Dr. Harris was born near Charlottesville, Va. He took his degree of M. D. in Transylvania in 1836, and was admitted to the same

degree in the University of Louisville in 1847. He was an eminent, laborious practitioner and an industrious writer. He served in the United States army for some time with General Wool, in the Cherokee Nation, and while in the service made the acquaintance of Dr. Forney, whose devotion to the study of climate and hygiene inspired him with similar tastes, and as the result he became a voluminous writer on the climate and fevers of our southern states. To his merits as a faithful physician Dr. Harris added religious and social virtues, which made him an ornament to the society in which he lived. Dr. Edmunds Mason, in a just eulogy on him pronounced at a meeting of the physicians of Wetumpka, says, "He was a Christian without guile." He had been many years a member of the Methodist Episcopal Church. When stricken down by the disease which terminated his valuable life he was industriously engaged revising his essay on "The Fevers of the Southwestern and Southern States," a new and enlarged edition of which he hoped soon to publish.

THE PRACTITIONER.—Dr. T. Lander Brunton, who succeeds the lamented Anstie in the editorial conduct of the Practitioner, says, in a graceful salutatory, "In attempting to take up the editorial work which has so suddenly and unexpectedly fallen from his hands, we feel that it is at the same time very difficult and very easy to succeed him; for while we can not hope to rival his facile writing and admirable style, he has himself smoothed his successor's way by furnishing an example which will keep us from going far astray if we only faithfully follow it. This we intend to do, and we shall strive to the best of our ability to make the Practitioner in future what it has been in the past—a real aid to those who feel that the great end of all their art is to relieve suffering and remove disease." We have no doubt that under Dr. Brunton's charge the Practitioner will continue to be what its late editor had made it, the leading journal in scientific therapeutics of the world.

POETRY AND PHYSIC.—One of our contemporaries, discussing this subject some time ago, attempted a quotation from *Terrible Tractoration*, in which he did the poem such injustice that we feel in conscience bound to come to the rescue of our early favorite. The following is the stanza which our learned contemporary attempted to give:

“Come on, begin the grand attack  
With aloes, squills, and ipecac;  
And then with glisterpipe and squirtgun  
There will be monstrous deal of hurt done.”

The fictitious name of the author of this amusing poem was “Christopher Caustic, M. D., LL. D., A. S. S.” His real name was Thomas Green Fessenden, an agricultural editor of New England, and a political writer of great point and force at the period when the contest between the Federalists and Democrats was fiercest. His assault upon Thomas Jefferson and Democracy provoked a reply from Irving and Paulding, editors of “*Salmagundi*,” in which they descended to call him “*Dr. Costive*, author of a poem with notes, or rather notes with a poem.” There is much to entertain medical readers in his *Terrible Tractoration*.

A CLINICAL LECTURE THIRTY-FIVE YEARS AGO.—Sir Anthony Carlyle, one of the surgeons to Westminster Hospital, is thus reported by Dr. Clarke: “The venerable knight passes by several beds, and looks at his patient or not as suits his humor. ‘This patient,’ said the dresser, ‘is only weak now, sir.’ ‘Then keep him in a week and he will be stronger,’ said the facetious Sir Tony. The dresser now exhibits a patient who he has reason to suspect has stone in the bladder, but who will not consent to be sounded. Sir Anthony, turning to Mr. Lynn, ‘Have you given him any excisable articles, for I know you are fond of them?’ On discovering that the man had been taking six ounces of wine daily, ‘That’s a large quantity,’ said Sir Tony, as he stopped the students to

ask them if they had heard the 'epigram' of the man who was asked why his nose was red. 'I drink so much red wine,' said the man; 'I drink it red and p— it white, and leave the red behind on my nose.'"

A SINGULAR LIBEL-SUIT.—Dr. Baird, of Daylesford, Australia, sued the town clerk for one hundred pounds sterling damages for having spoken of him as a "bounding medical kangaroo." The judge thought the phrase might be considered rather complimentary than otherwise, and the plaintiff was nonsuited, with costs.

FOWLER'S SOLUTION.—The last lingering doubt hovering in our mind as to the value of this time-honored compound was at once dispelled on seeing the formula which its lamented author gave for its preparation :

*Solutio mineralis.*

R.—*Arsenici albi in pulverem subtilissimum triti,*

*Salis alcalini fixi vegetabilis purificati, singulorum grana 64,*

*Aquæ fontanæ distillatæ, libram dimidiam.*

*Immitantur in ampullam florentinam, quâ in balneo arenæ posita, aqua lente ebulliat, donec arsenicum perfectè solutum fuerit. Deindè solutioni frigidæ adde :*

*Spiritus lavendulæ compositi, unciam dimidiam,*

*Aquæ fontanæ distillatæ, libram dimidiam, plus vel minus,*

*Adeo ut solutionis mensurâ libra una accureta sit, vel*

*Potius pondere uncie quindecim cum dimidiâ.*

# THE AMERICAN PRACTITIONER.

MARCH, 1875.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### ON THE PLACE OF ALCOHOL IN THERAPEUTICS.

BY LUNSFORD P. YANDELL, M. D.

The true place of alcohol among therapeutic agents is by no means a settled point in the minds of many practitioners. What in general is its *modus operandi*, what its effect upon the pulse and upon the temperature of the body in small and in large doses, and whether in any sense it can be considered a food, are questions which in the last few years have been discussed with great animation; and, as in regard to many other powerful remedies, the most contradictory views have been set forth respecting its action and its value. The great evils, physical and moral, that attend its abuse as a beverage have naturally excited prejudices against its use in disease, and there are those who would discard it altogether from medicine; while, on the other hand, a much larger number have undoubtedly employed it without discrimination, and to an extent not warranted either by experience or sound theory. By common consent in all past times it has been held to be the most reliable of all diffusible stimulants; but an eminent



English writer has lately asserted that it possesses no stimulant powers at all. The general opinion at this time in regard to its action on the animal system is that it retards tissue-change, and so supports the vital powers in wasting diseases; but only a few years ago a writer in the *British Medical Journal* advanced the opposite opinion, claiming that alcohol hastens the waste of the tissues, and that by such disintegration the body in sickness is supplied with food—in fact lives upon itself.

The thorough revision of this subject, brought about by the practice, which has been extensively pursued in late years, of giving alcoholic drinks in acute diseases, has put some of these questions to rest, and we are now in a position to form much more trustworthy opinions respecting the action of alcohol than was possible a few years ago. I propose in this paper briefly to inquire as to the points that seem to have been settled by recent experiments, and, in the light they have given us, what are the morbid conditions in which the use of alcohol is admissible or necessary.

The famous theory of Liebig, according to which alcohol is to be ranked with starch and fats among alimentary matters, as a supporter of combustion in the body by which animal heat is preserved, was for many years almost universally accepted by physiologists. Alcohol was regarded by all as a species of fuel-food, taking no part in nutrition, but capable in certain conditions of performing a most useful part in the animal economy. But in an elaborate memoir on the subject, by MM. Lallemand, Duroy, and Perrin, doubt at last was cast upon its correctness. These experimentalists claimed to have established the fact that alcohol undergoes no change in the animal body, but is expelled from it as swallowed, chiefly by the kidneys. Others, following up the investigation, professed to have recovered eighty per cent of the ingested alcohol; but in all these experiments enormous doses were given. Passing rapidly, as the fluid does, into the circulation, it was impossible

that all could be oxidized in a limited time, and some must be eliminated unchanged. When taken in moderate quantities there can be no doubt that it is wholly consumed in the system. This has been shown in such a multitude of experiments that the question must be considered settled. Even in poisonous doses not more than one fourth has been found retained in the bodies of rabbits after twenty-four hours. Dupré has proved by careful experiments on himself that the quantity exhaled by the breath and discharged with the urine is but a fraction of the amount imbibed. All up to a certain amount is burnt up in the round of the circulation. This amount, from a series of careful observations made by Dupré, Schulinus, and himself, Anstie places at one ounce and a half. So much is consumed in the system, and may be regarded as the limit of the proper dietetic amount. The quantity that escapes by the skin, bowels, or lungs, even when given in large doses, is admitted by all to be insignificant.

Alcohol then is to be looked upon as a form of food, ministering not to the growth of any tissue, but, like farinaceous substances, developing heat and energy in the system, and protecting the tissues against the wear and tear incident to the vital processes. It counteracts the disintegration of the blood-corpuscles as well as of the organized tissues, and thus supports the system in protracted cases of disease attended by loss of appetite and digestion.

It is now conceded by all physiologists that while Liebig's classification of food was substantially correct, his conception of the office of fats and starch—and of alcohol, which he placed by their side—was too narrow. Undoubtedly they develop heat in the process of oxidation which they undergo when heat is required, but in other circumstances, instead of heat, muscular or nervous force is demanded, and then heat assumes the shape of energy. We account in this way for the craving of fat food by laborers in southern latitudes, where certainly a calorifacient diet is not needed. And in states of

the system where wasting is going on from disease, and the supply is not kept up by the digestion of nutritive food, alcohol at once affords energy to the muscular and nervous systems, and protects the tissues against the disintegrating force of oxygen.

Alcohol has from its introduction as a medicine ranked among diffusible stimulants. It is esteemed the most powerful and the most reliable of its class. Dr. Stillé\* says, "Larger but still not excessive quantities of alcoholic drinks have for their direct effect to quicken all the functions, to excite the pulse and animal heat, promote the flow of thoughts, and augment the muscular strength." It has not yet been proved by experiment that alcohol produces any such effect upon the pulse. It quickens it undoubtedly, and to the finger seems to increase its force; but observations made with the sphygmograph by Parkes and Wollowicz render it doubtful whether such is the fact. On the contrary, Zimmerberg found in a number of experiments on cats that it reduced both the pulse-rate and the pressure; but, as justly remarked by a judicious writer,† this result, so opposed to general observation, may have been due to the enormous quantities given. In moderate doses it assuredly acts as a stimulant, and only exerts a debilitating influence when poisonous doses are given.

In regard to the effect of alcohol upon animal heat, the testimony of those who have been engaged in researches on the subject is not uniform. Until within a few years professional and popular opinions about it were all one way. Nobody doubted that its effect was to raise the temperature of the body. This heating power, in fact, afforded men one of the excuses for using it as a drink when they were exposed to cold. But this property has been seriously called in question. I remember to have heard my father state, a great many years ago, that he had in his own person proved

\* Therapeutics and Materia Medica, vol. i, p. 729.

† Dr. H. C. Wood, Therapeutics and Materia Medica.

the fallacy of the belief early in his professional life. He had never in his life, he said, been so near perishing from cold as he was one winter day of great severity, when, for the first time and the last, he tried to keep himself warm by whisky as he rode through the country visiting his patients. So fully was he satisfied that whisky had no power of warming the body that, strengthened by other and weightier considerations, he gave up its use, and was through life a teetotaler upon principle. The testimony of all arctic voyagers is opposed to the popular impression on this subject. I will only stop to cite a few authorities. Dr. Hays says that, according to his observation, "alcohol in almost any shape is not only completely useless but positively injurious" to men exposed to the rigors of the arctic regions. Sir John Richardson affirms that the men of the Hudson Bay Company bore up better under the cold and improved in health after spirits were entirely excluded. The statement of Dr. Rae, who has had ample opportunities for observing, is that the effect of alcohol during extreme cold is merely to purchase a temporary stimulus at the expense of subsequent great prostration.

Until of late, however, it was not suspected that alcohol under ordinary circumstances, and especially in disease, exerts a depressing influence upon vital temperature. The observation was made by Dumeril and Demarquay, in 1848, that in large doses it lowered the temperature of animals; and Lichtenfels confirmed the observation a few years afterward. He found that the heat of animals was uniformly depressed by alcohol in large quantities. But experiments in reference to this point have been contradictory. Parkes and Wollowicz, as the result of observations on a healthy soldier, conclude that alcohol increases the temperature of the body. Anstie found, as an average of his twenty experiments upon various animals, that the temperature during alcoholic poisoning rose more than three degrees Fahr.\* Lombard experienced a rise

\* Stimulants and Narcotics, p. 353.

of thirteen degrees in the temperature of his hand—that is, from  $83^{\circ}$  to  $96^{\circ}$ —after swallowing two ounces of rye whisky, but saw little effect from the spirits after his hand had reached its normal temperature. In experiments by Richardson the temperature of various mammals was raised half a degree by minute doses.

But the weight of the evidence obtained during the last few years, in which the inquiry has been so actively pursued, inclines the other way. I shall not stop to cite it, but only remark that Anstie, whose authority has been quoted for its calorifying power, insists strongly, in various numbers of the *Practitioner*, upon its power of reducing the temperature. As the result of what had been ascertained by Binz, Bouvier, Ringer, and Rickards, as well as by his own experiments, he says it may be concluded that alcohol in moderate doses causes a small, and in larger doses a considerable, reduction of heat.\* In poisonous doses the effect has been very decided. The temperature of animals was found by Ringer and Rickards to fall as much as three degrees Fahr. when alcohol was given to the point of causing intoxication. Riegel, more recently, has added strength to the testimony on this point. His conclusions, as quoted by Dr. H. C. Wood, are as follows:

“1. Alcohol, even in moderate doses, in many cases causes a lowering of the temperature of the body. The amount of this diminution averages, as a rule, only some tenths of one degree. 2. Only exceptionally is there noticed an elevation of the temperature consequent upon the administration of alcohol. Not unfrequently, at least after minute doses, there is no noticeable change. 3. The diminution of temperature in convalescents is, as a rule, less than in healthy subjects, or it may be altogether wanting. 4. In those who habitually drink alcoholic stimulants the depressing influence of alcohol upon the temperature is almost always wanting. 5. The

\* *Practitioner*, vol. xi, p. 424.

frequent repetition of the doses of alcohol diminishes their lowering effect upon the temperature. 6. The amount of diminution of temperature is directly proportioned to the dose of alcohol given. 7. The depression of temperature caused by alcohol is for the most part of but short duration, and the temperature soon returns to its previous grade."

It may be assumed from the various researches on the subject that another effect of alcohol is to diminish the animal excretions. This follows as the necessary consequence of lowering the temperature of the body. Whatever checks oxidation must reduce animal heat, and with it the excretion of waste tissue. If alcohol has any power to retard disintegration, it is obliged, as a part of the same process, to affect the excretions and the temperature of the body. Prout, who drew attention to this subject as early as 1813, remarked that the quantity of carbonic acid exhaled was materially less after taking alcoholic drinks. Dr. N. S. Davis has more recently shown that the quantity may be thus reduced fifty per cent. Nor is the effect confined to the lungs. Dr. Hammond has proved that the effect upon the kidneys is the same. Not only urea but the phosphates and chlorides were diminished in his case by alcoholic drinks. Experiments by Böcker tend to the same point. The results obtained by him may be stated as follows:

"1. The special action of alcoholic drinks is to arrest destructive assimilation, stop the overactive processes of life in their effects upon the organism; so that for a certain period during the stay of the alcohol in the system less urea, less phosphates, less water are excreted by the kidneys, less carbonic acid by the lungs, and less digestion goes on in the alimentary canal, showing that the muscles, bones, nerves, etc., are not getting rid of their effete tissue, but retaining it and making use of it as far as possible.

"2. But at the same time they give rise in the body to a defensive *reaction*, which is prominent first immediately after



taking the dose, then gives place to the special action, and on this ceasing is again manifested to a greater extent.

"3. So that if a suitable quantity be taken, and if both action and reaction be allowed to exhaust themselves before the dose be repeated, more manifestation of life, represented by more excretion, and more consequent renewal of the body, takes place in a given time with the alcoholic drink than without; there has been a positive gain in vitality.

"4. But if such large quantity is taken at once that the reaction is overpowered, or if it is arrested by a continuous repetition of the dose, the manifestation of life is kept down, the body is not renewed, because its effete particles are not removed, and the amount of vitality must certainly be reckoned at a loss." \*

In these facts, illustrative of the physiological action of alcohol, we have, I think, a scientific basis for its administration in disease. They afford a plausible theory of its *modus operandi* in the morbid conditions to which clinical observation has shown it to be best adapted. It checks disintegration of tissue, and as a "fuel-food" stimulates the nervous system and generates the muscular energy by which respiration and the circulation are maintained, thus supporting life while the disease is running its destined course. Not only so, but in certain febrile conditions, presently to be noticed, it lowers the abnormal heat at the same time that it arrests the waste and acts as a cordial to the system.

Alcoholic stimulants have been so long the cardinal remedy in syncope, in severe injuries and surgical operations, and in all cases of sudden prostration, that they would continue to be resorted to in such emergencies whether sanctioned by theory or not, and their claim to the first place among therapeutic agents in such conditions may be regarded as fully established. But in other morbid states for which they are constantly prescribed their efficacy is not so universally con-

\* British and Foreign Medico-Chirurgical Review, 1858, p. 240.



ceded. They are often undoubtedly of the greatest benefit in fevers, especially typhus fever, and yet they may be prescribed injuriously, and there are practitioners who would proscribe them altogether. I have seen them given in the typhoid state of malarial fevers, when those fevers were much more prevalent than they are at this day, with the happiest effect. One of the first cases in which I remember the practice, many years ago, made a deep impression upon me. The patient, a young man, took two pints of whisky in twenty-four hours, without any febrile excitement, and with manifest advantage. He recovered, and the happy turn in his disease was attributed to the alcoholic stimulant.

But it is in typhus and typhoid fevers, running through many weeks, and attended by rapid disintegration of tissue, while there is a great lack of nourishment, that these stimulants are especially indicated. They can not be given so early nor so invariably in typhoid fever, owing to the local lesions that attend this disease; but in both typhus and typhoid fever wine and other spirits have, I have no doubt, conducted the case to a favorable termination very often when death without them would have been the result. It is especially in the morbid conditions such as attend these fevers, where rapid waste is going on and but little food can be taken, that alcohol exerts its protective influence. When prostration, stupor, a brown tongue, petechiæ, and feebleness, softness, irregularity, and dicrotism of the pulse, are among the symptoms, it is clearly indicated. It is contra-indicated, according to Murchison, "in young patients, as a general rule, when its administration quickens the pulse; when the skin is dry and hot; when it increases instead of allaying delirium; when there is severe throbbing headache and active delirium, without much impairment of the force of the heart and pulse; when the urine is of low specific gravity, deficient in urea, or contains albumen, or when it is either scanty or suppressed."\*

\* A Treatise on the Continued Fevers of Great Britain, 1873, p. 280.

In many cases the feelings of the patient may be received as a criterion both as to the use of alcohol and whether wine or spirituous liquors are most suitable. Very often wine can be taken with advantage when spirits aggravate the symptoms.

I think I have not spoken too emphatically as to the utility of alcoholic remedies in certain febrile conditions, but I ought not to pass from the subject without adding that many able practitioners treat every form of fever without the use of alcohol in any stage of the disease.

Alcohol exerts a tonic influence in the stage of convalescence from fevers and other acute diseases, improving the appetite and digestion, and hastening the reparative processes. And here also the appetite of the patient may be taken as the best indication of the requirements in his case, and his taste should be consulted as to the character of the drink. Twice in my life I have had experience of the correctness of this principle of practice in my own person. When recovering from typhoid fever while a student of medicine in Baltimore I felt an urgent craving for brandy at a certain hour of the day, which continued to recur for several weeks, and in fact until I became alarmed, fearing that I had contracted a taste for drink; but it left me at last suddenly, and I had no return of the propensity until I was convalescing from an attack of remittent fever two years afterward, when I experienced the same desire for spirits. Fortunately it ceased, as before, on the full recovery of my health. I was in the habit of stating this case to my students, when I lectured on physiology, as an illustration of the principle that the appetite might be trusted as a safe guide in disease. One day, after relating it, I received a note from a member of the class saying that he had had an experience very similar to mine, but yet differing from it in one essential feature; "*the propensity had never left him.*" And herein consists a danger which should never be forgotten when we are tempted to prescribe alcoholic drinks in such cases.

The same remarks are applicable to the use of alcohol in pulmonary consumption. There are cases in which we can not doubt that it checks the progress of this disease, prolonging life many years, if it does not, with other appropriate remedies, cause obsolescence of the tubercles. The test for its use is its agreeing or not with the patient. When its effects are pleasant it is a most valuable remedy in phthisis, aiding digestion and invigorating the appetite, thus enabling the patient to take exercise, and improving the quality of his blood. But patient and physician must bear in mind that deliverance from one danger is purchased at the expense of another quite as serious. Many seeking safety from consumption in spirituous drinks have thereby become confirmed inebriates.

Delirium tremens is another affection in which theory suggests the use of alcohol, and clinical experience seems to have fully established its claim to be ranked as our most efficient agent in the disorder. Dr. Gerhard reduced the mortality among its subjects in the Pennsylvania Hospital from ten to less than one per cent by substituting the alcoholic for the opiate treatment. Solly, in his interesting work on the human brain, confirms this experience of Gerhard and others. He is in the habit of giving "the stimulus which the patient prefers, from being more accustomed to." It is proper to remark, however, that the testimony of the profession on this subject is somewhat contradictory. Murchison and other eminent authorities condemn the use of alcohol in delirium tremens.

In septicæmia it is claimed that alcohol, combined with quinine, exerts a decidedly beneficial effect. Professor Socin, of Basle, gave it in very large doses in septicæmic wound-fevers during the Franco-Prussian war, and under the treatment he saw, as he relates, "many unexpected improvements and even recoveries." Its effect was to reduce the pyrexial heat of his patients.

The late Dr. Todd, of London, a little over twenty years ago, acting upon the evidence of the power of alcohol to lower the animal temperature, prescribed it in large and repeated doses in fevers, and afterward in other acute diseases. The practice, though strongly opposed by most of his brother practitioners at home, soon spread abroad and obtained a wide currency in Europe and this country. It was founded on the doctrine that "all maladies should be regarded as more or less asthenic," requiring means that uphold the vital power. In pneumonia, as in fevers, this course was pursued, but, it is stated on the best authority, with very unsatisfactory results. Except indeed the sanguinary practice of Bouillaud, statistics prove that no other method has been so unsuccessful. In typhoid pneumonia the supporting treatment may be called for; but even in this type of the disease, which prevailed in our country as an epidemic sixty years ago, my old friend, Dr. Hogg, of Tennessee, thought he obtained good results from bleeding his patients *ad deliquium animi*. A disease which runs so short a course as pneumonia can hardly require agents to check disintegration of tissue and support the vital power; and if the aim be to reduce febrile excitement, no one, I suppose, will claim that alcohol, even in the largest doses, is so effectual in reducing temperature as veratrum or aconite, not to mention blood-letting.

A sense of comfort is imparted to persons troubled with nervous complaints by the cordial influence of spirituous liquors, and a dram before meals increases the appetite and promotes digestion in many dyspeptics; but nothing is more perilous than the habit of using spirits in such affections. Every practitioner of experience must be able to recall instances of persons ruined by the practice. Many such occur to my mind. So great appears to me to be the danger of intemperance from the habitual employment of spirits for a long time that I would discard their use in nearly all chronic complaints.

Spirituous liquors have been greatly abused by men on the plea that they ward off malarial fevers and other diseases. They are resorted to in every epidemic of cholera, and continued, the taste for them having been acquired, after the danger is over; so that it may be said every cholera-panic creates a host of drunkards. Alcoholic drinks have no prophylactic power. They prevent no disease, and invite an indefinite number. Annesley, after a long professional experience in India, declared "that the habit of dram-drinking destroys more lives in that country than the climate or the sword." In other climates the experience of medical men has been similar. The experiment was made in Holland of giving spirit-rations to four regiments, and withholding them from three selected for the purpose. "In the former case the sick in two of the regiments amounted to one in forty-four, in the third to one in twenty-nine, and in the fourth to one in forty-six; while in the latter the proportion of sick in the first regiment was one in one hundred and sixteen, in the second one in sixty, and in the third one in one hundred and fifty-eight." \* There can hardly be a doubt that while a few persons may be able to use spirituous liquors for a great while with comparative impunity, their habitual use is injurious to health; and all physicians will agree that constitutions affected by their use succumb more readily to every form of disease.

It is a conclusion reached by life-insurance companies, as the result of careful inquiry, that the average life of teetotalers is about sixty-four years, while that of drunkards and moderate drinkers is thirty-five years and six months. Mr. Clark, in a recent discussion, in London, of the effects of alcohol, asserted that all the forces of the body are diminished by its use; and on the same occasion Dr. Drysdale affirmed on his own experience that beer-drinkers had a worse appetite, lost their sight earlier, and lived a shorter time than water-drinkers.

\* Stillé's *Therapeutics and Materia Medica*, vol. i, p. 739.

Some one who was acquainted with the history of alcohol, and understood well its effects on men, has left these quaint lines concerning it:

“Is ‘aqua’ alcohol?  
Yes; ‘aqua fortis’;  
‘*Aqua vitæ*’ once;  
Now ‘*aqua mortis*.’”

The lines contain a terrible truth most forcibly expressed. Alcohol when first introduced to the world in its concentrated form, during the eleventh century, was invested by the imaginations of men with a strange potency. Its vendors claimed for it the virtues of an elixir, of a catholicon, and physicians doled it out in guarded doses under the pretentious name of “*aqua vitæ*.” But, passing from the shops of the apothecaries into general use, it soon earned a title to the other name, “*aqua mortis*,” for what other agent known to men opens so wide an outlet to human life? That it can ever be brought under medical control or restricted again to its legitimate uses no one is visionary enough to imagine. Nevertheless grave responsibilities in relation to it still rest upon our profession. Physicians are bound by every consideration to prescribe it with a reserve that shall not encourage its use. They owe it to society and to themselves to study carefully the morbid conditions demanding it, and to employ it in no others. As has been correctly remarked by Professor Miller, of Edinburgh, “its power is limited to those cases in which a necessity exists for its use. Any other than its most guarded and anxious employment is both unscientific and unsafe.” Prescribed, as we must believe it has been too often, without discrimination, it can not be doubted that in many instances it has done great immediate mischief, and in many more has led to a taste more to be feared than the disease for which it was prescribed.



## A CASE OF WORMS IN THE URINARY BLADDER.

BY MELVIN RHORER, M. D.

Several weeks ago I was called in consultation to sound a gentleman supposed to have stone in the bladder. The patient, aged sixty-four years, was a farmer, who had for the past twelve months been affected with occasional interruptions to the flow of urine, which for the last three weeks had increased in severity, causing great pain in evacuating the bladder, and which now amounted to almost a total retention. His bladder was very much distended, he having passed no urine for forty-eight hours, except a constant dribbling of highly-colored urine, with an occasional drop or two of blood.

I easily introduced a catheter and evacuated the bladder, finding in the vessel about forty or fifty small red worms about half an inch in length, and having a number of legs arranged in two distinct rows from one extremity to another, and their bodies being encircled with numberless small cartilaginous rings. It was with some difficulty that I pressed a lancet through the body. In about two hours the patient, at my suggestion, forced a passage from his bladder, amounting to several ounces of urine, with about half a dozen more worms. No attempt was made to sound for stone, the diagnosis being too clear as to the cause of the trouble. We ordered spirits of turpentine internally, and the catheter to be employed daily. For the following ten days he passed from four to six worms at every action; since which time he has voided urine without the use of the instrument, and the discharge of worms has ceased. He has no pain on micturition, and is free from his late trouble, except a sense of soreness over the hypogastric region.

This case is one of special interest to me, since none of



the treatises on surgery which I possess even allude to worms in the urinary bladder. Will the editors of the American Practitioner enlighten me on the subject?

COLUMBIA, KY.

[In most of the recorded cases of worms in the urinary bladder the animal was of the lumbricoid or ascaridic variety, and was known to have found its way from the alimentary canal, its proper habitat, into the bladder, usually through some accidental communication between these parts. Three species of worms, however, which are peculiar to the bladder have been described; the *spiroptera*, the *dactylius aculeatus*, and the *diplosoma crenatus*. The first of these was discovered by Mr. William Lawrence\* in the urine of a young woman, who passed during two years as many as a thousand of the little animals, that "varied in length from four to six inches, and were remarkably slender at the middle, from which they gradually increased toward the extremities, which were small and tapering. One of the surfaces of the body exhibited the appearance of a double row of small protuberances, while the other was marked by a groove with two rising edges. They were soft when first voided, and of a yellowish color. The body seemed homogeneous throughout, and careful microscopical observation failed to throw any light upon its organization."

Gross, in his masterly work on the Urinary Organs, gives a minute and very interesting description of the next variety, discovered by Mr. Curling, and named by him *dactylius aculeatus* because of its peculiar ring-like appearance: "The worm is of a light color, cylindrical in its form, annulated, and slightly tapering toward the extremities, particularly the anterior, which is the smaller. The female is four fifths of an inch long; the male two fifths. The head is truncated; the mouth orbicular; the neck distinctly annulated; and the

\* Medico-Chirurgical Transactions, London, vol. ii.

tail, also annulated, is obtuse. The tegument, of a delicate transparent structure, and containing two layers of muscular fibers, one circular and the other longitudinal, is armed with a number of sharp-pointed spines, arranged in equidistant rows, in clusters of three, four, or even five. They cover nearly the whole surface, and seem to be perfectly under the control of the animal, which has the power of protruding and retracting them at pleasure. The alimentary canal commences at the mouth by three small convoluted tubes, which soon unite into a single one, which proceeds for some distance in a tortuous direction, when it becomes sacculated, and, enlarging as it descends, terminates at the extremity of the tail in a trilobular anus."

The *diplosoma crenatum*, of which it appears no perfect description has yet been given, is said to vary "in length from four to six or eight inches, and is thinnest in the middle, where it is bent at an acute angle upon itself, so that the two halves hang nearly parallel, and give to it an appearance as if two worms had been tied together by their heads." (Dunglison.)

Dr. Brigham, of Hartford, reports\* the case of a woman who after an attack of typhoid fever voided two small worms from the bladder. Four years subsequently she again began to experience vesical annoyance, which continued for about twenty years, toward the latter part of which time her sufferings were extreme. She was finally relieved by passing "a round white worm about six inches long."

One of the most remarkable cases of vesical worms on record is that reported by Dr. Bardwell, of Indiana:† "The patient, a man, aged thirty years, had been subject from his earliest infancy to attacks of intermittent fever, and for some years past he had suffered under severe pain in the bladder and difficulty in urinating, attended with all the usual symp-

\* American Journal of the Medical Sciences, 1837.

† Gross on the Urinary Organs.

toms of stone. His digestive organs had become greatly deranged, and his general health had much declined. Various plans of treatment had been pursued without any material advantage, until one day, while laboring under the effects of a large dose of castor-oil and spirits of turpentine, he voided upward of seventy lumbricoid worms. Before the effects of the medicines had passed off numerous worms were discharged by the urethra, accompanied by bloody urine and great distress in the passage. They were from six to nine lines in length, and about the thickness of a horse-hair, with a black and rather large head, their color being of a dark, dirty-white. They possessed considerable activity, could crawl about on the ground or on the floor, and many of them lived twenty-four hours after they had been voided. They continued to be discharged for more than six months, many thousands coming away during this period. The urinary disease gradually subsided, the general health rapidly improved, and eventually the man entirely recovered. The use of turpentine, which was kept up for some time, seemed to have been of the greatest benefit in this case."

The worms removed by Dr. Rhorer do not appear to be identical with the species described by either Mr. Lawrence or Mr. Curling, but rather to resemble those passed in the following case related by Dr. Campbell:\* "A man, sixty-five years of age, passed in the space of three weeks thirty small red-headed worms, not more than half an inch long. Their bodies were made up of a great many minute cartilaginous rings, and were furnished with a number of legs, arranged in two distinct rows, extending from one extremity to the other. They were hard, very active, strong, and remarkably tenacious of life. Two of them, inclosed in a quill and carried in the pocket, were at the end of four weeks as lively and vigorous as at the moment when they left the bladder."

The only diagnostic sign of vesical worms is, as Dr. Gross

\* Op. cit.

justly remarks, the presence of the worm itself. The same high authority thinks that entozoa infesting the bladder must be beyond the reach of drugs by the mouth, and considers the mode of treatment which promises most is that by stimulating injections into the bladder, the organ being first emptied of urine. Frequent catheterization has often been sufficient to cause the expulsion of the pests. A case is related where a number of worms were removed by means of Hunter's forceps from the bladder of a young woman.]

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## CONTRIBUTIONS TO OBSTETRICS.

BY THEOPHILUS PARVIN, M. D.

### RETROFLEXION OF THE PREGNANT UTERUS.

CASE I.—Mrs. ——— consulted me in March, 1874, in consequence of severe leucorrhœa, pelvic pain, and rectal tenesmus. She had been an invalid since the birth of her only child, about two years previously, and presented not only a very anæmic condition, but also had those various sympathetic disturbances so characteristic of uterine disease. Menstruation had not occurred for nearly six weeks, and this was the only indication of the possibility of pregnancy; but considering her exhausted condition, the profuse leucorrhœa, and a well-marked retroflexion of the uterus, it seemed to me that the possibility was negatived. Several times I endeavored by manipulation—almost constantly by the horse-shoe pessary, and twice by the uterine sound—to restore the uterus, but failed. Local treatment then was limited to occasional applications to the cervix and the wearing a pessary. In six weeks from the time I first saw her, and quite a month after the last introduction of the uterine sound, she aborted; a result which probably was not to be regretted, for I do not believe the uterus could have been in any way lifted from its abnormal position. The retroflexion still persists.

CASE II.—In May last I saw a lady, in the northern part of the state, suffering with similar symptoms, only menstruation was regular.

She had been confined once. Suggesting to a medical relative the treatment which seemed to me advisable—a treatment that I afterward learned was not carried out, in consequence of the protracted illness of her child—I did not see her until some months after, when she came to consult me because of a supposed pregnancy and an increase of the special troubles attributed to the retroflexion. She had missed her “periods” twice, and had many of the usual signs of pregnancy. I could easily, with two fingers in the rectum and one in the vagina upon the anterior portion of the cervix, restore the uterus partially, but immediately upon the withdrawal of the fingers it fell back into its malposition. The only treatment instituted was frequent evacuation of the bladder, several times each day assuming the knee-and-face posture, and the use of Hodge’s pessary. In about two months she visited me again, and I found the retroflexion quite gone, while the uterine globe could be readily felt in the hypogastric region.

*Remarks.*—More than a century ago William Hunter described a case of retroversion of the pregnant uterus, which terminated fatally; and subsequently, in the year 1776, he published a paper upon the subject, alleging as the usual cause of the accident a distended bladder, and teaching that this accident was sudden in occurrence. He made three degrees of retroversion; viz., first, the uterus may be fully retroverted; or second, half retroverted; or third, so far in its natural state that the orifice of the uterus shall be downward. It will be observed that the third of these varieties would now not be termed retroversion, but retroflexion.\*

The teaching of Hunter in this regard governed the views of obstetricians until quite recent years. In 1860 Tyler Smith, in an able paper presented to the London Obstetrical Society, challenged the correctness of that teaching, asserting that “the impregnation and development of the uterus previously retroverted is the common and ordinary way in which gravid

\* The term *retroversion* was first applied by Gregoire, professor of accouchements, Paris, 1747, to the displacement posteriorly of the pregnant uterus; and Puech remarks (*Gazette Obstétricale*, August 20, 1874) that this term is not quite accurate, since retroflexion produces the same effects, etc., and that more than one half the cases are examples of this displacement, and not of retroversion.

retroversion is produced; that it does not occur suddenly, except in very rare and exceptional cases, but is the result of the gradual and progressive increase of the retroflexed or retroverted uterus after conception;" and this view is generally held by the profession to-day. And certainly in one of the cases we have narrated the displacement was antecedent to conception (probably the same was true of the other also), and illustrates the correctness of Dr. Smith's assertions.

The case in which abortion occurred illustrates another truth established by frequent observations: a woman with a retroflexed uterus is peculiarly liable to abort. But suppose abortion does not occur, what is the subsequent history? Probably in the majority of instances spontaneous restoration occurs, the growing uterus finally and gradually moving in the direction of least resistance, helped thitherward, it may be, by the contraction of some at least of its normal supports. This result not obtaining, death may succeed from peritonitis, from uræmia, or from gangrene of the uterus, of the vagina, of the rectum, or of the bladder. (Puech.) With such possibilities before him the practitioner has no right to trust a retroflected pregnant uterus to the chances of nature remedying the deviation. The restoration too, whether effected by art or by nature, is rarely if ever immediate. Adopting the language of Dr. Barnes in reference to these cases, we may say that the great remedy for retroflexion is a Hodge's pessary. It will probably be necessary to change the pessary occasionally, introducing one of a larger size, or increasing the curvature of the short arm of the lever. How long should this be worn? \* When the uterine globe is distinct and prominent in the hypogastric region it is doubtful if the pessary

\* Some have advised wearing the pessary up to the fifth month. As the length of the uterus at the end of the fourth month is from five and a half to six inches, materially exceeding the longest diameter of the superior strait, it must be obvious that the uterus then in normal position could hardly be retroverted or even retroflected so as to enter the pelvic cavity.



can be of any further use. Furthermore, the patient should be enjoined not to lie upon her back, but upon her right side or on her face, and once or oftener each day take a position upon her knees and elbows or chest.

#### PLACENTA PRÆVIA—INDUCTION OF PREMATURE LABOR.

Mrs. K., seven months advanced in her first pregnancy, sent for me in consequence of uterine hemorrhage. This hemorrhage, which was quite copious, was temporarily restrained by an alum-and-cotton tampon. It recurred occasionally and moderately during the succeeding two weeks, when another and larger flow took place, so that her cheeks were quite blanched and her pulse was feeble. There was an entire absence of uterine contraction. Believing that the ordinary obstetric practice, *tampon and temporization*, would involve greater peril to both mother and child than early delivery, I determined to induce premature labor. Dilatation of the os was effected by Molesworth's dilators, and when the dilatation gave a circle about two inches in diameter—this being accomplished in three hours, during the last of which regular uterine contractions occurred—I passed a finger up on one side, between the placenta and the uterus, and ruptured the membranes. In two hours and a half the head was well down in the pelvic cavity and the os sufficiently dilated. I completed the delivery with Churchill's forceps. The child, though very small and feeble, has done well, and so has the mother. The placenta was remarkable not only for the lateral instead of central attachment of the cord, a battle-dore placenta, but also from its unusual shape, measuring ten inches and a half in one direction and five transversely. The great mass of it was attached to the left side of the uterus, then extended over the internal os, and up on the right side at least two inches.

*Remarks.*—The treatment of *placenta prævia* is by no means settled, though, as we have before said, temporization and the tampon combine the practice inculcated by most authors to guide the physician called to a case prior to the completion of pregnancy. Leishman, in his excellent work on obstetrics, remarks that when "the fetus has reached the period of viability we endeavor to avert premature delivery as long



as possible, in order to give the child the best possible chance;" and this may be taken as probably representing the general opinion and practice of the profession.

On the other hand, Dr. T. G. Thomas, in a very able article in the *New York Medical Journal*, February, 1870,\* declared it his "conviction that in every case of declared placenta prævia premature delivery should be induced."

We believe that the rule asserted by Dr. Thomas is much better than that of Dr. Leishman, and that its general observance would save many a life. The mortality to mothers, according to the statistics collected by the late Prof. Simpson, is about one death in three, while sixty-nine per cent of the children are lost. In Johnson and Sinclair's *Practical Midwifery* (London, 1858) twenty-four cases of placenta prævia are given, six mothers and thirteen children dying. Dr. Barnes, in 1864, in sixty-four cases coming under his observation, states that only twenty-three of the children were born alive. Dr. Greenhalgh, in the paper to which reference has already been made, has collected three hundred and fifteen cases; fifty-eight of the mothers dying, and one hundred and ninety-three of the infants still-born. However much these statistics may vary in the percentage of deaths of mothers, they all agree in making that of infants more than fifty per cent.

Now can we not, ought we not, by the induction of premature labor in every case of placenta prævia where hemorrhage after the seventh month is either so violent or so frequent that the lives of both mother and infant are in jeopardy,

\*The language of Dr. Thomas is only a little stronger than that of Dr. Greenhalgh six years earlier (*Transactions of the Obstetrical Society*, London, vol. vi), but the lesson is essentially the same. Dr. G.'s language is as follows: "That in any given case of hemorrhage due to placenta prævia occurring after seven and a half months of utero-gestation, when the child is viable, it is expedient both for the safety of mother and child to expedite labor, unless the condition from exhaustion be such as to preclude this step—and if so, then as soon as possible after she has recovered from the shock—by every means in our power," etc.

with the probability that the latter will be lost, conjure away this common peril? And if this be conceded, it will also be acknowledged that our art should be an imitation of nature; an imitation of nature, first, in the dilatation of the os by hydrostatic pressure; an imitation of nature, again, by retaining the bag of waters intact until the os is considerably, not necessarily *completely*, dilated and dilatable; an imitation of nature, finally, in abstaining from ergot altogether, or at any rate until there are demand and opportunity for expulsive, not dilating pains. Remembering that the mortality to infants when premature labor in general is induced by puncturing the membranes is not less than twenty per cent, this practice does not seem the best in the accident we were here considering, if the life of the child is an element to be regarded in our therapeutics. So too ergot is objectionable in the same view, unless in the conditions mentioned.

Another rule which the case narrated is designed to illustrate is the early application of the forceps. While we may not be willing to accept as demonstrated the statement of Dr. Thomas\* that the child depends "for the aëration of its blood upon a crippled and bleeding placenta" in so far as he attributes hemorrhage to this organ—the peril to the mother is from hemorrhage, to the child from suffocation, as Schroeder expresses it, and the "crippling" of the placenta is not from loss of blood, but from insufficiency of that portion still in relation with the uterus for the maintenance of its function—yet all must acknowledge the longer the second stage of labor the more the infant's life is in jeopardy. Now we have no means to abridge that stage so certain and so safe as the forceps. Finally, the statistics of podalic version, as it regards mothers or infants, are not so encouraging, nor is the operation in such cases always a matter of so easy performance, that the practice should be followed save by exception.

\*Op. cit.

## RUPTURE OF THE PERINÆUM—IMMEDIATE OPERATION—SUCCESS.

Mrs. K., a healthy woman, about thirty-five years of age, was in labor with her fourth child, when, as happened in her previous labors, there was delay in the second stage of labor. As in two of those labors I had delivered with forceps, I applied them in this; but finding when the head was brought down upon the perinæum that there was no yielding of that structure, I removed the instrument, determined to wait upon nature, very much against the patient's remonstrances, who was earnest for an immediate delivery. In two hours more the head was born, but the perinæum and recto-vaginal wall for two inches and a half tore like a piece of wet blotting-paper. The accident occurred about two A.M., and I waited until the morning light was sufficient to see to operate. The operation was simply drawing the recto-vaginal rent together by two silver sutures, and the same number for the perineal. The after-treatment consisted in fastening the patient's limbs together by a bandage about the knees, requiring her to lie upon one or the other side, catheterizing the bladder morning and evening, and by opium preventing evacuations of the bowels. At the expiration of eight days, after having had the bowels moved by castor-oil and a warm-water injection, I removed the sutures, and to my most agreeable surprise found the restoration perfect.

*Remarks.*—Rupture of the perinæum is to the practitioner one of the most mortifying accidents of parturition, and to the patient, if the rupture extend through the anal sphincter, it is both a serious annoyance and disability. The question of an immediate or of a secondary operation is one which at once suggests itself to the practitioner. The weight of authority is very decidedly in favor of the former. Dr. Thomas remarks,\* "I have in a number of instances resorted to immediate operation, and the result of my experience leads me to always adopt it, unless the sphincter ani and the recto-vaginal wall be implicated in the laceration to such an extent as to make the operation a serious and a lengthy one, or to insure the passage of lochial discharge between the lips of the

\* Diseases of Women, 4th ed., p. 130.

wound." And Dr. Barnes remarks,\* "When laceration of the perinæum is detected at the time of its occurrence it is best to stitch it up at once."

We confess we can not see the force of the exception to operating which Dr. Thomas makes, for it would seem to be just those cases where the sphincter ani and recto-vaginal wall are implicated that most imperatively demand an immediate operation; a less lesion may heal spontaneously, or may be no permanent or ultimate inconvenience; and it may be doubted as to the introduction of two or three more sutures materially rendering the operation more "serious and lengthy," while the insinuation of lochial fluid between the lips of the wound is not any more likely to occur at one point than another of its line of transit. The patient should be kept upon her side after being operated on, and thus this accident will be measurably prevented. The condition of the tissues involved and the patient's state are elements to be considered in deciding for or against immediate restoration of the perinæum.

While we can hardly hope for a natural cure where the sphincter ani and the recto-vaginal wall are involved in the rupture, yet in the *Annales Gynécologie* for September, 1874, p. 233, Dr. Bleyne narrates a case where such rent occurred from the use of the forceps, and yet this rent healed *spontanément et intégralement*. However, such a happy result is so completely exceptional that the practitioner has no right to depend upon its repetition.

Were we formulating a rule as to the cases in which an immediate operation is required, it would be, for reasons already indicated, almost diametrically opposed to that which has been quoted from Dr. Thomas, although, of course, the conclusion of this eminent writer and practitioner is right if the correctness of his premises be conceded.

\* Clinical History of the Diseases of Women.

## UTERINE INVERSION—REDUCTION.

On the 9th of last October I was called to visit Mrs. C., twenty-two years of age, in consequence of her suffering with menorrhagia. This disorder dated from her first and only confinement, which occurred September 2, 1873. Information was further given me that after a labor of fourteen hours her child was born, but that in the removal of the placenta severe pains occurred; she, screaming from the suffering, sprang up in the bed in a sitting posture, flooded and fainted. Furthermore, I learned that there had been some doubts and differences of opinion among various medical gentlemen who had seen her since her illness commenced. The treatment instituted and the treatment proposed during that illness I refrain from mentioning, as unfortunately a suit for malpractice has been commenced.

The patient presented marked anæmia, as would readily be imagined when it is known that her menstrual flow ordinarily lasted from twelve to fourteen days, and was profuse; sometimes indeed there was hardly a day in the month when she was free from hemorrhage. Exhausted by this drain, discouraged by the discrepancy of medical opinion in reference to the nature of her malady, as well as the failure of medical treatment hitherto to materially benefit her, her request was simply for treatment to lessen the menorrhagia.

Examination proved that she had inversion of the uterus; and upon my assurance that I believed reduction could be accomplished both she and her husband readily consented to have the attempt made. Five days after my first visit, assisted by Drs. Patterson, Walker, and Henry Jameson, and the patient being anæsthetized, I made my first effort to reduce the inversion. The effort was by the different methods of taxis,\* and was continued for two hours, and each of the gentlemen in turn tried. We all failed, or at any rate only partially succeeded. I endeavored to retain the slight advantage gained by pressing against the fundus the concave end of a stethoscope covered with flexible rubber, the instrument being held in position by a T-bandage. At the expiration of twenty-four hours the instrument, causing so much distress, had to be removed. Copious cold-water injections were directed to be used daily, and at the expiration of a week I applied a curved rubber rod with a

\* Among these were Courty's and Noegerath's.

"cup" to receive the fundus, and its external extremity secured by a rubber band, so that continuous *elastic* pressure, as proposed and practiced by Dr. Barnes, might be tried. In forty-eight hours this instrument too caused so much distress that it had to be removed. As menstruation was near, no further effort at reduction was made until five days after this had ceased.

On Saturday, the 14th of November, assisted by the gentlemen whose names have already been given, and the patient being profoundly under the influence of a mixture of ether and chloroform, another persevering attempt at reducing the inversion was made. At first the uterus was manipulated with the left hand, alternately expanding and contracting, with slight upward pressure, until the size of the organ was thus lessened; then the *repositor* of Dr. White was introduced, and steady pressure, with suitable counter-pressure, was made for nearly two hours. Still the uterus was unreduced, and upon withdrawing the repositor the organ seemed smaller and quite hard. I then introduced a pair of Bond's placenta-forceps (the blades of which had been previously prepared for this emergency by thickly covering their extremities with chamois-skin), grasped the uterus with them, then expanded the blades, making alternately approximation and separation, with the former also some upward pressure. Quite a free hemorrhage followed this operation, which was continued about ten minutes, and the uterus again was quite soft and relaxed. The forceps were now replaced by the repositor, and pressure resumed. Within ten minutes restoration was accomplished so far as returning the uterus within the os, and thereupon removing the instrument the fundus could be felt just within the latter like a descending polypus; then a rectum-bougie pressed against this presenting fundus almost immediately caused its ascent to its normal place, and the reduction was completed—completed in just two hours and a half from the commencement of the administration of the anæsthetic mixture.

The patient's convalescence was all that could be desired; menstruation has become normal; the uterus, which for some weeks after the operation was retroverted, is in natural position; and she is now, I believe, quite as well as could have been anticipated after her protracted suffering.

I ought to have stated that immediately upon recovering from her anæsthesia the patient had one fourth of a grain of morphia hypodermically, and the next day quinia and opium every two



hours, with turpentine stupes to the abdomen, and tepid mucilaginous injections into the vagina.

*Remarks.*—It is not proposed to make any extended remarks upon this case, the successful issue of which has been a source of such great happiness to all parties concerned, and which adds another to the long list of reductions of chronic uterine inversion.

To one who studies the histories of such reductions it must be evident that no one method should be followed to the exclusion of all others. Even so rude a method as that observed by Carter, physician of the French consulate at Tangier, was successful; the patient suspended head downward, two stout men holding her up by her feet, while a bottle of oil was poured into her vagina and pressure made. Martin, of Orleans, in 1853 reduced an inversion in thirteen days simply with cold water. The air-pessary succeeded in the hands of Tyler Smith and others; elastic pressure in those of Dr. Barnes. The repositor of Depaul at one time succeeds in his hands; and in another, in a case attended by himself and Nélaton, November, 1860, perforates the uterus, and the patient is dead in two days.

But one of the most remarkable facts in the study of inversion is that months and even years after the accident has occurred the uterus has restored itself—spontaneous reduction occurred. Several such cases are recorded in Dr. Hodge's *Obstetrics*. Comparatively recently such a case occurred at Breslau under the observation of Spiegleberg, the displacement having existed for more than two months.\* But such happy accidents are so rare, so improbable of repetition, that they can furnish no rule of action or excuse for abstinence from action.

However operators may differ as to methods, whatever successes each may claim, there is hardly one among these methods that has not now and again been followed by a fatal

\* *Gazette Obstétricale*, August 20, 1874.



result. Nevertheless I wish to express my decided preference for the repositor of Dr. White over the various methods of taxis, and to commend its faithful trial to all who in a given case find other means futile, or who shrink from the various methods of taxis, which when used by coarse and clumsy hands and brutal force may, possibly has, inflicted fatal injury. The failure in my case of taxis and of elastic pressure, and subsequent success chiefly with the repositor, presents a strong evidence in its favor.

Another point of interest in the history reported is the retroversion of the uterus for some time after the cure of the inversion. I believe it will be found, as a *rule*, that the uterus after the reduction of a chronic inversion will be for a time retroverted or retroflected. The reasons for this must be obvious to any one who considers for a moment the agencies which prevent such accidents, and how under months of stretching they have been elongated and temporarily lost their tonicity. In the case quoted from Spiegleberg a slight retroversion is mentioned as having succeeded the reduction. I trust professional attention may be directed to the point suggested, and by and bye facts enough will be collected to prove its truth or its error.

Any consideration of the causes and consequences of uterine inversion and its diagnosis would too much protract this paper already longer than the author intended.

INDIANAPOLIS.

## TWO CASES OF TRAUMATIC PARAPLEGIA.

BY GEORGE N. MONETTE, M. D.,

*Physician to St. Anna's Asylum.*

CASE I.—A colored man, aged forty-five years, of immense physical development, was admitted into the Charity Hospital with a fracture of the eleventh dorsal vertebra. He was a somnambulist, and on the night of the 7th of December he ventured over a dilapidated portion of a balcony, lost his footing, and fell across a fence, causing the fracture above named. There was a complete dyæsthesia of the inferior extremities, with entire loss of motor power, paralysis of both the vesical and rectal sphincters; in fact there was complete (traumatic) paraplegia. I gave him a powerful cathartic, which proved inert. I then resorted to rectal enemata, and to the use of the catheter, three times daily. His urine was of a highly sanguineous appearance, yet after a day or two it was more transparent. Some dyspnœa was evident on the fourth day, but was relieved by external applications. He did not suffer much pain. When necessary an anodyne was given. Within ten days gangrene appeared at the great toe, which soon involved the entire foot. Deep bedsores formed on both nates. He survived the accident twenty-two days.

CASE II.—Wm. Donohoe, white, aged thirty years, laborer, was crushed by a cotton-bale falling a distance of thirty feet upon him on December 24th. He was admitted December 27th. I used the catheter at once, as his bladder had been distended since the injury. The case was similar to that of the first. He seemed to suffer greatly, and an anodyne was given. January 12th, a perineal abscess formed; ulceration about the orifice and extending to scrotum; œdema of penis and prepuce. January 16th, sloughing of scrotum continues. January 17th, a portion of nates separated. January 19th,

more of the scrotum follows; patient in a semi-comatose condition. January 20th, suffers great oppression. January 22d, sloughing of nates complete; changed frequently from side to side. January 23d, dozing; urine dribbling; a scybalous stool voided unconsciously. February 5th, gradually succumbing; emaciation complete in lower extremities. He died on the 17th of February, 1870, surviving the injury fifty-two days.

NEW ORLEANS.

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AN EXTENSIVE EPITHELIOMA OF THE LIP REMOVED  
BY SULPHURIC-ACID PASTE—NO RETURN AT THE  
EXPIRATION OF TWENTY-ONE MONTHS.\*

BY PINCKNEY THOMPSON, M. D.

Mr. E., a wealthy planter of Henderson County, fifty-five years of age, consulted me in September, 1863, about a growth or formation on the lower lip, which caused him some inconvenience. He described it as a hard, dry scab, which would become detached and fall, leaving the denuded surface very sensitive, and causing sometimes a very slight bleeding. Another scab would soon form and run a like course. The period of these changes was variable, sometimes occupying but two or three weeks, again extending through several months. I advised the immediate removal of the growth, but the patient would not consent.

I did not see Mr. E. professionally again until the summer of 1865, when my attention was specially called to the lip trouble. The sore had now visibly increased in size, having invaded the lip below its red border, and forming a hard, gristly tumor about the size of an ordinary army-bean. I advised the patient to give up his cigar—he was an inveterate

\* Read before the Henderson Medical Club.

smoker—and again insisted on removing the tumor. The cigar was discontinued, but the operation was declined.

I heard little of the case from that time until November, 1872, when, being called in to see another member of the family, I learned to my surprise, and I may add regret, that Mr. E. was at that moment in an adjoining room with a “cancer doctor” from somewhere in Indiana, who was attempting to remove the tumor with a caustic which he professed to have invented. This “caustic,” according to the charlatan’s story, had, of course, cured its hundreds without a single failure. In this case, however, it did fail after two trials. In fact it not only failed to relieve or remove the tumor, but caused fearful and fruitless suffering, and certainly seemed to aggravate the disease, the local irritation following its use appearing to increase the size of the tumor with great rapidity; it also increased the pain.

The following March, 1873, Mr. E. consulted Dr. D. W. Yandell, who concurred in the opinion that it was epithelioma, and advised its immediate removal. My patient, preferring to have this done at home, returned; and on the urgent recommendation of Dr. Hanna and myself, fortified by Dr. Yandell’s opinion, he at last consented to an operation; but had such a dread of the knife, and insisted so on the use of a caustic, that we yielded to his strongly-urged preference.

On May 21, 1873, assisted by Dr. Hanna, I applied, as Dr. Yandell had recommended should be done, the sulphuric-acid paste \* to the entire mass, which at this date included almost

\* This paste is described in the American Practitioner for August, 1871, under the title of “Michel’s process for removing external tumors,” and is made and applied in the following way: Asbestos, as soft and free from grit as possible, is reduced by rubbing between the hands to the finest possible fleecy powder. It is then mixed thoroughly with three times its own weight of strong sulphuric acid ( $\text{S O}_3 \text{ H O}$ ). A mass is thus formed which may be easily worked with a silver or gold spatula into any size or shape corresponding to the tumor to be destroyed. In the application of the caustic the adjoining healthy parts of the skin are carefully protected by applying a zone of collodion and pads of linen, and the patient is so placed that the surface of the tumor is perfectly level. The saturated acid

the whole of the lower lip. After protecting the sound tissues by means of adhesive plaster, I proceeded to apply the caustic, by means of the handle of a silver spoon, layer upon layer, until it reached one fourth of an inch in thickness. The pain which ensued was somewhat severe, but lasted only about forty minutes. Destruction of the entire cancerous tissue soon followed, and by the next morning seemed to be complete. I now directed flaxseed poultices, in order to hasten the detachment of the slough. Eleven days elapsed, however, before the whole of the slough came away, leaving, to my great gratification, a healthy granulating surface, which under a few applications of a solution of nitrate of silver (ten grains to the ounce) healed rapidly and perfectly. Because of its supposed virtues in such affections, I put my patient under a course of arsenic, which was continued for four or five months.

In conclusion, I am glad to be able to state that Mr. E. has remained in excellent health, never having had the slightest indication of a return of the growth since its removal, now twenty-one months ago.

HENDERSON, KY.

asbestos is then laid on the surface to the necessary thickness. Rapid destruction of the tissues follows, with, after the first half hour or so, but little pain. An oozing of clear watery fluid appears, which must be carefully sopped up. After twelve or fourteen hours' action the first application is to be removed, and, if necessary, a new portion of smaller size adapted to the sore. After this has been applied for twelve hours the operation is complete, and the healing of the deep excavation alone requires to be attended to.

## Reviews.

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**Pulmonary Tuberculosis:** Its Pathology, Nature, Symptoms, Diagnosis, Prognosis, Causes, Hygiene, and Medical Treatment. By ADDISON P. DUTCHER, M. D., late Professor of the Principles and Practice of Medicine in the Cleveland Charity Hospital Medical College, Ohio. Phila.: J. B. Lippincott & Co. 1875.

Dr. Dutcher states in the preface to his work that he does not claim for it any special originality, and adds the very doubtful proposition that it will not be any the less valuable to the profession on that account. A book indeed might be eminently original without containing much truth, and consequently be nearly worthless; but certainly its value is in exact proportion to its originality, supposing the original views it offers to be true as well as new. Pulmonary Tuberculosis is one of the last subjects on which we should look for originality, discussed as it has been by so many able observers and writers in the last half century; but it is one of such importance that we can easily pardon an author who comes with even the scantiest store of facts to enlarge our knowledge concerning it.

The originality of the work before us consists in certain opinions as to treatment, and in the discussion of matters bearing remotely upon tuberculosis, rather than in any observations on its nature, pathology, hygiene, or cause. The author holds, with most American and English authorities, that tuberculosis is not of an inflammatory origin, but a blood-disease, which shows itself first in disorders of the digestive apparatus. And yet, as he remarks, we see patients who suffer with dyspepsia during a life-time without becoming consump-

tive; and, on the other hand, it is not an uncommon thing to meet with tubercle in new-born children; so that the blood dyscrasia can not be dependent wholly upon indigestion.

As an early symptom of tubercular disease Dr. Dutcher attaches much importance to Thompson's gingival margin. Out of two hundred cases he found it in one hundred and seventy-five. The line deepens, according to his observation, as the disease progresses, assuming at last a vermilion tint. The early appearance of it he regards as an unfavorable circumstance. This margin around the gums has enabled him in many cases to detect tuberculosis in its pretubercular stage, and to meet it when most curable. It is a good sign when the streak disappears under treatment. In regard to the gingival margin his conclusions are these: 1. It is an unfailing sign of the tubercular diathesis; 2. When present, no matter how obscure the other symptoms of pulmonary tuberculosis may be, we may with certainty predict it at no distant day; 3. No matter how favorable the other symptoms, treatment must not be discontinued until the streak has wholly disappeared.

Dr. Dutcher is fully convinced not only that tubercle may be absorbed, but that cavities may be healed, and large cavities more readily than small ones. He is not prepared to reject altogether the contagiousness of pulmonary consumption. As to climate, he insists correctly that cold is not in itself a cause of tuberculosis. Texas, particularly the southwestern portion of it, is his favorite residence for consumptives in winter. His remarks on clothing and on the hygienic treatment of phthisis are highly judicious; but he goes more into details about the constitution of the atmosphere than was necessary in a work on pulmonary tuberculosis, and tells what every student of medicine is presumed to know about the changes effected in the air by respiration.

In reference to alcoholic drinks in phthisis, his opinions are extreme; and we are compelled to add that what he has



written on this head proves him to be unacquainted with the last researches on the subject. His reading appears to have stopped with the memoir of Lallemand, Perrin, and Duroy, the conclusions of which have been thoroughly disproved by later experimentalists. His own experience is that alcohol has no power to arrest or retard tubercular disease; and he questions whether alcoholic drinks do not, on the contrary, hasten its fatal march. He denies that alcohol is consumed in the body; scouts the idea that it can in any sense perform the part of a food; and, in the face of all the recent observations made respecting it, asserts that "it goes into the blood alcohol, and comes out the same." "Some writer," he continues, "has had the *audacity* to affirm that alcohol acts in the same manner as cod-liver oil, by supplying respiratory materials and increasing the fat of the blood;" and then he goes on to say, "I do not see how it ever entered into a sane man's brain, *unless the devil put it there*, that alcohol was food. The idea is a delusion, a phantom of an intoxicated brain!" And, as if all this random assertion were not bad enough, he adds, "I have most generally found that those writers who recommend alcohol as a beverage are more or less addicted to its intemperate use!"

This is what Dr. Dutcher styles "ventilating" the subject of alcohol, and he evidently knew what he was about; it is wind, a good deal more than light, that he has brought to bear upon the subject. His assertion that alcohol is unchanged in the body he will find negatived by a multitude of experiments, and will perhaps conclude that the idea of its being a sort of food is not wholly preposterous. Whether it is useful in phthisis is another question, and one respecting which the opinions of practitioners are not in full accord. A longer experience with it is necessary fully to determine the matter, but the practice has the sanction of many able and experienced physicians. But that alcohol in the changes it undergoes in the system may prove a source of vital energy, sup-

porting the patient, and protecting his organization against the wasting effect of oxygen, there is assuredly no audacity in affirming. But the various questions in dispute have been so fully discussed in another article in this number that we deem any further statements here unnecessary. Before Dr. Dutcher ventures to write again he will do well to inform himself as to the present attitude of these questions.

Of the style and manner in which this book is written we have perhaps afforded our readers sufficient means of judging in the few quotations we have made. The intemperance of the language is something strange in a professional work and in the discussion of matters relating to science. This, however, we can in some sort overlook in view of the zeal inspired by his theme. We can tolerate great warmth in a writer whose mind is aglow with the evils of alcohol; but we can not pardon such writing as we find in many of the chapters of this book; in that, for example, on the "Power and Grandeur of the Mind," running thus:

"How wonderful, how complicated is the human mind! Who can portray the magnificence of its powers or the vastness of its comprehension? Think for a moment of its capabilities and the grandeur of its achievements! Man has but to will, and in an instant his mind is soaring with a velocity which leaves the flashing light of heaven far behind *his speed*. At will he mounts to the starry heavens, and, wrapt in wonder and admiration, gazes on the sparkling gems of night!"

Nor this, on "the sentiments:"

"Take a case of disappointed love. See that delicate and emaciated female; she is on the brink of the grave. I knew her when the rose of health bloomed upon her cheek, and hope danced before her captivated vision in the sunshine of coming prosperity, and joyous anticipation painted in glowing colors the veil of futurity. . . . If this earth ever gave birth to an angelic spirit, it was *she*. But in an unlucky moment she received a blow, from which she has never recovered. Disappointed love has crushed her heart. At the very moment expectation stood on tiptoe the

idol of her soul eluded her grasp. The blow was too severe, and phthisis is now consuming her vital powers, and death is waiting for its victim."

In a certain class of novels we have no doubt this would be considered by their juvenile readers very fine writing, but we hold it to be quite out of place in a book on pulmonary tuberculosis; and accordingly our advice to Dr. Dutcher would be to draw his pen remorselessly through all such passages as these when he sits down to prepare a second edition of his work. So much of its originality we must consider decidedly objectionable, as relates to professional men at least, however it may be adapted to the general reader, for whom in fact it seems to have been written.

L. P. Y.

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**Introductory Lecture** of the One Hundred and Ninth Session of the Medical Department of the University of Pennsylvania. By ALFRED STILLÉ, M. D., Professor of the Theory and Practice of Medicine, etc. Philadelphia: Collins, printer. 1874.

Much more than the usual interest of introductory lectures attaches to this discourse by Prof. Stillé. In itself it possesses extraordinary merit. Its tone, its style, its thoughts, all are elevated, sound, graceful, and scholarly. In every one of these qualities it will compare favorably with any introductory lecture delivered within the last year any where in the English language. But the circumstances under which the address was delivered invest it with a peculiar interest. It is commemorative of an important event in the history of the University of Pennsylvania, the name of which awakens pleasant associations in the mind of every American physician. The mother of American medical schools, having entered upon her second century, was taking possession of a new edifice prepared for her accommodation. Three generations of her teachers had passed away, and the great-

grandsons of those who laid the foundations of the school were speaking to the profession of what they proposed to do for its advancement.

One, as he reads the ornate discourse of Dr. Stillé, is naturally carried back in thought to the first address delivered in behalf of this school, when to most of those who heard it the idea of establishing a school of medicine on this side of the Atlantic appeared chimerical. Dr. John Morgan, addressing the trustees of the College of Philadelphia in May, 1765, says, "Perhaps this medical institution, the first of its kind in America, though small in its beginning, may receive a constant increase of strength and annually exert new vigor. It may collect a number of young persons of more than ordinary abilities, and so improve their knowledge as to spread its reputation to distant parts. By sending these abroad duly qualified it may give birth to other useful institutions of a similar nature, calculated to spread the light of knowledge through the whole American continent wherever inhabited."

The words of the address were prophetic. All that Dr. Morgan predicted concerning the embryo institution has come to pass; but he correctly described the day of which he was speaking as one of small things. The college at first had but two professorships, in which were comprehended all the branches of medicine; Morgan teaching the theory and practice of physic, and his colleague, Dr. Wm. Shippen, anatomy and surgery. Midwifery was embraced in the latter, and was taught by Shippen in a dozen lectures, which was precisely the number of students that attended his first course on anatomy. A third chair, that of *materia medica* and botany, was created three years later, to which Dr. Adam Kuhn was elected. In the same year Dr. Thomas Bond was appointed professor of clinical medicine, and in 1769 Dr. Benjamin Rush was elected professor of chemistry. The growth of the school was slow. During its first decade it turned out but twenty-eight graduates—"bachelors of medicine"—or less than one

fourth of the number who for a great many years past have been admitted by it annually to the degree of M. D.

Dr. Stillé thinks it would be difficult for one "acquainted with the humble lodging which sheltered its ambitious faculty to recognize in it the primal idea of the palace" they had met to inaugurate. And yet the contrast between the new edifice and the old structure is not greater than that between the museum and apparatus in the hands of the present faculty, and the slender means of illustration at the command of its first professors; and this is hardly so great as the contrast between the present method of teaching medicine and that which was pursued by Shippen and Rush. Improvement is seen every where. The century has been to the university, as it has been to the profession all over our country, one of immense progress. Medical schools, medical journals, medical books have been multiplied to an extent altogether unparalleled. But still defects exist in the system prevailing in all our medical schools, which call for correction. Dr. Stillé admits their existence in the University of Pennsylvania. The faculty, he says, are zealous for "an enlarged and elevated curriculum," and he hopes soon to see a system of instruction put in practice which is "demanded by the example of all foreign and even some American medical colleges." This he believes is demanded of the University of Pennsylvania "as the oldest medical college in the United States." He is convinced that an attempt to restrict the study of medicine "within the old-fashioned term is not only impossible but absurd."

We have never fallen in with the complaint, of which so much was heard a few years ago, about the decline of American medicine; but, on the contrary, have been ready to maintain on all occasions that the profession is steadily progressive. The lecture-term in most of our schools, if not in all, has been extended, and the curriculum materially enlarged; the lectures are very much better illustrated by apparatus and models,

and all the means of addressing the eye, and more time and consideration are given to clinical instruction; the effect of which has been to render the teaching more practical, and to produce graduates better instructed in the art as well as the science of medicine. And yet we agree with Dr. Stillé that an enlightened public opinion demands of the schools that they shall take another step forward. They have done much in the last half century, but much remains to be done. Defects exist in our system which ought to be corrected.

No one whose experience reaches back many years can have failed to remark the increasing impatience of our young men to complete their course of study. Morgan said, in his address to the trustees of the College of Philadelphia, that he had reached "the middle age of life in endeavoring to lay up treasures of useful knowledge before he commenced a settled practice." Rush was five years a student of medicine, and declared that in all that time he had never wasted a day in idleness. Two years may probably be assumed as the average duration of medical pupilage at this time, certainly it would not reach three years, and the disposition is to shorten the period still further. As now arranged, with summer as well as winter schools, a student may commence the study of medicine in autumn and become a graduate the following summer.

Now, while all will admit that the system of instruction in our schools has been vastly improved, all must see that medicine has also been greatly enlarged. No doubt under this wiser system a student may acquire a better knowledge of his profession in three years than under the old he was able to do in twice that time; but then he has more than twice as much to acquire if he would learn all that a graduate of this day ought to know. We can easily believe that a bright student, by a judicious process of "cramming," might pass a very satisfactory examination after attending one winter and one summer course of lectures in immediate succession,

and with only nine or ten months' study; but we should despair of convincing any educated physician that such a graduate would be qualified for the duties of his profession. For improved as have been the methods of teaching, no "royal road" to medical knowledge has yet been discovered, and time is still an essential element in maturing a medical education. The capacity of the human mind remains ever the same. It takes just as long now to dissect a subject or to learn the anatomy of the human body as it did in the times of Vesalius or of the Monros. A practical acquaintance with medicine, such as every graduate should have, and such as is now within the reach of every student, is not to be acquired in a few months. "It never has been and never will be that a mind hastily stuffed and overladen with knowledge will profit by it." The student must have time, not only to store his memory with the details of the science, but to make himself somewhat familiar with the art of medicine.

We are quite sure that the profession will not sanction any movement that tends to shorten the period of study by increasing the facilities for obtaining a diploma; but, on the contrary, that it is demanding a longer course and a wider curriculum in the schools. If we are not greatly mistaken, it will frown upon any plan which proposes to take a raw student in October and turn him out an M. D. the next July.

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### Clinical Lectures on Diseases of the Nervous System.

By WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System in the University of the City of New York, etc. Reported, edited, and the histories of the cases prepared, with notes, by T. M. B. CROSS, M. D., Assistant to the Chair of Diseases of the Mind and Nervous System in the University of the City of New York, etc. *Nil desperandum*. New York: D. Appleton & Co. 1874.

In no class of maladies perhaps has medical treatment been more advanced during our period than the diseases of



the nervous system. Among them for a long time were to be found many of the *opprobria medicorum*, but it is now known that some of these are amenable to treatment; in fact that as a class we may enter upon their management with a considerable degree of assurance. Dr. Hammond adduces in this volume fresh proof of the value of therapeutics in these affections, and has invested his subject with such interest that no one who takes up these lectures will be willing to lay them down till he has finished the volume.

The volume embraces twenty lectures, and treats of partial cerebral anæmia, alternate cross hemiplegia, congestion of the spinal cord, lead paralysis, corea, aphasia, facial paralysis, cerebral hemorrhage, posterior spinal sclerosis, muscular atrophy, convulsive tremor, epilepsy, chronic basilar meningitis, cerebral congestion, facial neuralgia, sciatica, organic infantile paralysis, etc. The lectures are illustrated by cases, well reported, which impart a great additional interest to the subject. Dr. Hammond shows the immense utility of the ophthalmoscope in the diagnosis of cerebral affections. The instrument by revealing the pathological condition indicates the therapeutic agent to be employed. Speaking of epilepsy he says, "In the diurnal form I have found the bromide to act favorably, while in the nocturnal the strychnia had been productive of much more success; however I place more reliance on the condition of the cerebral circulation, as seen by the ophthalmoscope, in regard to treatment than I do on other indications." We heartily recommend these lectures to practitioners, who will find in them many admirable suggestions.

## Clinic of the Month.

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INFANTILE LEUCORRHOEA.—Dr. Bouchut (*Annales de Gynécologie*), in a clinical lecture, refers to two cases of leucorrhœa occurring in children—the one a diathetic disorder, the other resulting from want of cleanliness—stating that these represent the character in many examples of this disease, while other cases are the consequence of attempted rape or of masturbation, or of syphilitic or gonorrheal infection. The most frequent causes are herpetism or the herpetic diathesis, scrofulosis, and want of cleanliness. In fact in typhoid fever, a septicæmic disease, and in virulent measles, the vulva is often covered with a muco-purulent oozing of a very irritating character; and if the children are not carefully washed, a follicular vulvitis occurs, followed by ulcerations with reddish borders and a grayish pseudo-membranous bottom, resembling aphthæ of the mouth. Soon these ulcers become phagadenic, hollowing in all directions, causing more or less destruction of the vulva, and extending even to the anus. In other cases beneath the ulcerated follicle the cellular tissue becomes engorged, forming a hard base, accompanied by swelling and redness of the labium majus; then a blackish eschar appears, and, rapidly extending, becomes true gangrene of the vulva, generally followed by the death of the patient. These varieties are the most grave and the least common. Those connected with scrofula or herpetism do not involve such serious results. After continuing some weeks or months they disappear.

The seat of leucorrhœa in children is always at the vulva, while the leucorrhœa of adults is vaginal or uterine. The liquid secreted is a more or less abundant acrid pus, irritating,

of a greenish white, and leaves green stains upon the linen. It causes an obstinate *pruritus*, compelling the infants to rub the parts frequently, and thus sometimes may induce habits of masturbation. From the vulva the fingers of the child may convey some of the pus to the eyes, and thus very violent purulent ophthalmia be produced; hence the importance of preventing such an accident.

If the leucorrhœa be caused by ascarides coming from the rectum to the vulva, use a solution of carbolic acid as a wash for the vulva and as a rectal injection, or injections of soot, and use rectal suppositories of mercurial ointment. In the leucorrhœa of acute diseases lotions of water and aromatic wine may suffice; but if there are ulcerations with a phagadenic tendency, apply an ointment made of one part of coal-tar to ten of lard, and wash morning and evening with a saponified solution of coal-tar. If in place of an ulcer there be an eschar, detach it and sprinkle the surface with camphor. When the leucorrhœa has scrofula or herpetism as its cause, give cod-liver oil and the arseniate of soda. Let the patient have a daily bath of carbonate of soda, of sulphur, or of corrosive sublimate. Lotions of corrosive sublimate, of carbolic acid, or of the saponified coal-tar, may be used, and, if the disease is obstinate, penciling the inflamed part with a solution of nitrate of silver.

THE COLD BATH IN SCARLET FEVER.—In an exceedingly interesting paper in the London Lancet, by Dr. T. Clifford Allbutt, a writer whom we have often quoted in this journal, we find the following concerning cold bathing in scarlet-fever cases attended by hyperpyrexia:

“Armed with the thermometer, be not taken by surprise, and do not delay your remedies until your patient’s state is already desperate. It is very sad to be called, as many times I have been called of late, to a patient in scarlet fever whose temperature has risen to 108° or 109° unperceived, and whose

chances of safety may have slipped away. Cool spongings, light clothing, open windows, wet screens, fatty inunctions, ice, various kinds of packs, all or any of these may let or hinder the evil which in adults is so hard to meet, not for want of knowledge, but for want of means and of intelligent and able assistants. In children, however, so easily handled, and so easily packed or bathed, it is even harder to see lives wasted, not for lack of these, but too often for lack of knowledge. These we may hope, even in later stages, to snatch from death, while in the case of adults there may not be time or opportunity for measures which, with time, are not easily undertaken.

Among the cases reported by Dr. A. is that of a delicate child. "His father was a medical man, and was in great distress about him. At my first visit his temperature was  $105.3^{\circ}$ , and rising. I hinted at the course which I should advise, but my words fell then on stony ground. A few hours later, when I called, the temperature was over  $106^{\circ}$ , still rising, and the symptoms of hyperpyrexia were very severe and alarming. I now pointed out decidedly to the father that his child would almost certainly die if we temporized further, and that if cool bathing were resorted to at once he might live. The father told me honestly that his prejudices were strongly against the procedure, but after some thought he said he would carry out whatever I wished; and, having thus promised, he carried out the plan most loyally and skillfully. I need scarcely say that my wishes were that the child should be put into a bath at  $90^{\circ}$ , which was to be cooled down to  $70^{\circ}$ , the thermometer being carefully watched the while; that when the child's temperature had fallen to  $101.5^{\circ}$  he was to be removed to a warm dry blanket, a hot-water bottle placed to his feet, and a little brandy and water administered. Struggling, screaming, and unconscious, the child was thus immersed, and on his removal the temperature, as usual, fell still further; viz., to  $98^{\circ}$ . On my return

in a few hours the little fellow was slumbering sweetly, and had slept for four hours. He had taken food consciously, and the fever temperature was  $102.5^{\circ}$ . It continued to rise, and the former symptoms began to re-appear. The father again used the bath with the same good results, and from this time recovery was rapid and uninterrupted. I need not say how great was his surprise and gladness; nor need I say how great is mine also to number him among the few who, like brands snatched from the fire, have been restored to life by one of the most brilliant discoveries of rational medicine."

THE WET SHEET IN SCARLATINA.—Dr. John Taylor, of Liverpool, communicates his experience in this matter to the London Lancet, and says, "My plan of procedure is to immerse a night-gown, slit up at the front, in hot water (half a pint to a pint), pure or medicated with a drachm or two drachms of tincture of capsicum, or in the infusion of three or four pods, or in mustard-water, the clear supernatant fluid from a table-spoonful of mustard to a pint of water; extending the gown over the feet by means of a towel immersed in the same fluid, both to be well wrung out and suddenly applied, and the patient quickly packed in two blankets previously placed on the adjoining sofa or bed; another blanket or two pillows, or an eider-down quilt covering all. Modern experience has witnessed the amazing relief procurable from the wet sheet, in its simple form, in pyrexial and glandular disorders, and from the medicated form in the zymotic and spasmodic affections. In stridulous croup, for instance, I have seen the mustard sheet act magically after other means more orthodox had failed. Its power is also potential in diphtheria simulating croup, and, in strong doses, in inflammatory croup, sometimes averting the impending tracheotomy knife."

AT WHAT AGE SHOULD CLEFT PALATE BE OPERATED ON.—Mr. Francis Mason, of St. Thomas's Hospital, gives (*ibid.*)

the following answer to this question: "I have operated at various ages, and although I am far from believing that it is necessary to wait until the age of fifteen or sixteen, yet I can not but think that at the present day we are apt to go to the other extreme by operating too early in life. Every case must of course be judged on its own merits, but I venture to think the age of six or seven will, as a rule, be found to be as early as is compatible with the successful issue of the operation."

WHEN SHOULD PSOAS ABSCESS BE OPENED?—Mr. Walter Rivington, of the London Hospital, in an instructive lecture (*ibid.*) on the varieties of psoas abscess, thus answers the above question:

"In the present state of our knowledge I believe I am giving you sound advice in recommending you not to be in a hurry to touch these cases. Try change of air, tonics, and generous diet, and only interfere if the abscess is spreading inconveniently and threatening to burrow among the muscles of the lower limb, or if you think there is danger of some serious complication, such as a communication being formed with the peritoneum or the hip-joint.

"In the cases which are uncomplicated with spinal disease the abscess should be opened as soon as it is accessible in the groin. In some instances it would be justifiable to cut down upon it over the iliac fossa, proceeding, of course, with all the caution necessary to avoid the peritoneum; but in general it would be better to wait until it could be pressed below Poupart's ligament.

"How should it be opened? Almost every surgeon has had his favorite method of opening abscesses, and that method has been the outcome of his pathological creed. I am in favor of an incision sufficiently free to allow an unimpeded exit to the pus, and, as Mr. Bryant has remarked, to permit the escape of air again if any should enter the abscess cavity.

Mr. Luke had some very successful cases of large abscesses treated by much freer incisions than those generally employed. Moreover, I am in favor of such an application of the anti-septic system as shall prevent decomposition and putridity of discharges without occasioning an injurious irritation. So far as my experience has extended, I do not regard the pneumatic aspirator for opening abscesses with any degree of approval, valuable as it is in its other applications. Drainage-tubes passed from one end of an abscess to the other often prove most serviceable when we have a large cavity to deal with, and are disinclined or are unable to make free incisions. They permit a free discharge of pus, prevent bagging, stimulate the cavity to contract, and encourage the growth of granulations. I do not believe in the application of ice with the same fervor as Mr. Simon, because I do not regard the chronic secretion of pus, etc., as dependent on any elevation of temperature of the pyogenic surface which the external application of ice can subdue.

“With regard to opening psoas abscess which has entered the thigh I would offer one suggestion. We know that the neck of the abscess is situated outside the femoral artery, immediately below Poupart's ligament. To whatever extent the abscess has descended in the thigh, I would recommend that an incision should be made down to the abscess at this spot (if impulse can be felt here on pressure or coughing), so as to insure a free evacuation of the pus from the part of the abscess cavity in the abdomen, and to prevent the pus passing backward and endangering a communication with the hip-joint.”

PHOSPHORUS AS A STIMULANT.—Dr. John Brunton, of London (*ibid.*), gave phosphorus to a patient under the following circumstances: “On examination I found the characteristic rose-colored spots of typhoid fever, and he had all the other symptoms present. His fever continued gradually to increase,



when he said to me, 'I am going to die;' and he looked like it. His conjunctivæ were injected, his breath cold, his skin cold and clammy; pulse 48, very weak and compressible; voice whispering; temperature 96.4°. He was in a condition of extreme depression. I at once administered phosphorus, in doses of one twelfth of a grain, every two hours, and I was surprised to find on my next visit, eighteen hours after, when he had taken three quarters of a grain of the drug, that he had quite revived. His skin was comfortably warm, eyes not so suffused, voice more natural; pulse 72; temperature 99°. I immediately stopped the phosphorus and gave nitric acid. Since then he has gone on prosperously, and is now convalescent. Heroic doses need careful watching, and I am sure the formula appended is most stable and active, and it is not unpalatable. I do not think I should care to go beyond one or at most two grains of the drug, divided over two days.

R. Ethereal tinct. phosp. (gr.  $\frac{1}{3}$  to  $\frac{1}{2}$ ),  $\bar{5}$  iij;

Spt. vin. rect., . . . . .  $\bar{3}$  ss;

Glycerin. anhydr., ad . . . . .  $\bar{3}$  iss.

One tea-spoonful as a dose."

THE TREATMENT OF FISTULGUS SINUSES BY THE ELASTIC LIGATURE.—Mr. Allingham, of London, in a recent article on the above subject, thus sets forth, in the Medical Press and Circular, the probable advantages of this ligature over the knife in ordinary sinuses: 1. The operation is commonly painless, and the subsequent suffering, if any, is usually very slight; 2. It is bloodless; 3. There is greater rapidity of cure; 4. The patient need not keep his bed, nor even his room, but may go into the air and drive or walk in moderation; 5. Its peculiar applicability to delicate patients and those who have a phthisical tendency; 6. There is usually no anæsthetic required; 7. There is a minimum amount of suppuration; 8. And one may add that the ligature is often very advantageous as a supplement to the knife.

THORACENTESIS.—Dr. J. R. Wardell, in the British Medical Journal, thus states the conditions which may be regarded as the morbid states, and the positive and negative signs demanding the operation:

1. In all cases in which inspection and the physical signs give evidence of a large quantity of fluid, when there are symptoms of compression of the lung, and there is manifest cardiac displacement.

2. When there are urgent dyspnœa, an irregular pulse, and threatening of orthopnœa.

3. When the affected side is smooth and rounded, and the intercostal spaces are effaced or protrude; when measurement proves bulging; when the dullness in the chest is complete, or demarkated, and absolute; when there is abolition of tactile fremitus; when there are broncho-phonic voice, tubular breathing, and absence of breath-sound; when the patient can only lie on one side or in diagonal position; and when there is the hippocratic sign of succussion.

4. When the exploratory needle proves the fluid to be purulent.

5. If the heart be pushed from its normal situation, and the apex be substernal or beyond the right sternal edge, or if it be thrust toward the left hypochondrium, or if it be lost; when it becomes presumptive that the organ has been driven inward and backward; and when on the one side the liver depends abnormally into the abdomen, and when on the other side the relaxed and down-pressed diaphragm so displaces the spleen that its free edge can be *felt*.

6. When half the thoracic cavity is filled, and a month or so shows no proof of absorption, the longer the delay the less are the chances of expansion.

7. In those exceptional cases of double pleurisy when both cavities become half filled with affusion, and dyspnœa shows the lung-space to be dangerously encroached upon.

8. In pulmonary phthisis, when the accumulation of serous

or sero-purulent secretion causes distress, and when the other lung assumes the symptoms of bronchitis or pneumonia, the operation should at once be performed.

9. In mechanical hydro-thorax it may be had recourse to, though with no object to cure, but with merely a view for a time to prolong life and to aid the action of medicinal remedies.

10. In children, whose chest-walls are thin, and in whom the white tissues are more developed and confer greater resiliency to the thoracic parietes, and whenever there are certain evidences of fluid, it should without delay be evacuated.

11. In hydro-pneumothorax it may be generally with safety and benefit employed.

12. Pointing externally should never be waited for.

13. Under certain circumstances repeated tapings are required.

CYNARA IN RHEUMATISM.—As long ago as 1833 Dr. Copeman published some cases of rheumatism treated with the common artichoke in the form of tincture and extract. The result was so encouraging that he has ever since employed the tincture and extract of cynara for the cure of rheumatism with perfectly satisfactory results. He says (*British Medical Journal*) that in his experience no other medicine has appeared to be so efficacious in rheumatism as cynara, whether in the acute or the chronic stage. Dr. Copeman usually administers it in the following form:

R. Potassæ bicarb.,	. . .	ʒj;
Aquæ camph. ad.,	. . .	ʒ viij;
Tinct. cynaræ,	. . .	ʒ j;
Syrupi papaveris alb.,	. . .	ʒ ss. M.

Two table-spoonfuls to be taken every four hours, with as much of the extract of cynara as would make two moderately-sized pills. Lemonade is given to quench the thirst. Should the case prove obstinate, it is perfectly safe to increase the

dose of the tincture gradually from one to four drachms. Although Dr. Copeman has found cynara, when given, to yield such good results, he says that he has frequently heard of its having failed in other hands, and he suspects the reason to be that it is often prepared from leaves gathered at an improper time, when there is no medicinal virtue in the plant. He says that the leaves ought to be gathered "just before the top of the vegetable is fit for food, and while they are full of juice. If left until the top is cut off for cooking purposes, and the plant begins to wither, no good will be derived from it, and if given it would be condemned as useless and inert.

TREATMENT OF MALARIAL HÆMATURIA.—Dr. Alexander, in the *Atlanta Medical and Surgical Journal* for January, gives a history of this endemic, and submits this as the best treatment: "Of the curative plan of treatment there seems to be a diversity of opinion. In the first cases I met with (and since then I have seen a great many) I used quinine, with muriated tincture of iron, and the revulsive treatment boldly; but frequently, after giving large doses of quinine and iron, I found the hæmaturia would seem to be worse, and I attributed it to the influence of the quinine, and consequently changed my plan to that of opiates, astringents, and arterial sedatives, with no better success. In the midst of these conflicting and unsettled plans of treatment I called in another physician to consult with me. Upon seeing cases repeatedly, and knowing that this type of fever was of a distinctly malarial character, we determined to rely upon quinine as the sheet-anchor in the treatment, and to give it in large doses, repeated until the patient was brought fully under its influence, so that the recurring chills would be prevented, and the patient thus rescued from immediate danger, because every chill lessened the patient's chances for recovery. To sum up the whole course in a few words: on first visit we find the patient very restless, with high fever, nauseated stomach, and occasionally

voiding the bladder of bloody urine; skin jaundiced; thirst almost intolerable; frequently vomiting a dark-green bile. At once I would advise a fourth grain of morphine to quiet all restlessness, and use sinapisms of mustard over the stomach and bowels, with a hot-mustard foot-bath. After quiet was restored and reaction fully established, I would put the patient upon quinine and iron in sufficiently large doses to bring him at once under its influence; for in my opinion, based upon a large experience, unless the patient is speedily relieved of these persistent chills, his chances to recover will scarcely be one in seventy-five."

INFLUENCE OF MERCURY ON THE RICHNESS OF THE BLOOD IN RED AND WHITE CORPUSCLES.—M. Malassez has invented an ingenious instrument for counting with precision the number of white and red globules in a given quantity of blood. From some researches made with it by Dr. Wilbouchewitch, of Moscow (*Archiv. de Physiologie*), the following conclusions have been reached in regard to the action of mercury on the blood:

1. Before treatment the number of globules progressively diminishes and descends below the average. Syphilis is apparently a cause of hypo-globulie.

2. During treatment the number of globules increases and becomes normal. It is difficult not to see in the constancy of this fact the influence of the mercurial treatment, and not to conclude from it that mercury arrests and cures syphilitic hypo-globulie.

3. The treatment being continued, the globules diminish in number. Mercury given in too large doses, or during too long a time, causes anæmia; destroys the good it had done.

MERCURY AS A CHOLAGOGUE.—In Dr. Murchison's lecture on the functional derangements of the liver (London Lancet) he expresses his belief that mercury and allied purgatives

produce bilious stools by irritating the upper part of the bowel, and sweeping on the bile before it has time to be absorbed. He adds that there are grounds for belief that mercury acts beneficially in many functional derangements of the liver. The good effects of mercury on the liver, and in some forms of inflammation, may be due to its property of promoting disintegration. Mercury apparently has the power of rendering effused lymph less cohesive, and so facilitates its removal by absorption. It is not improbable that mercury may under certain circumstances promote or influence the disintegration of albumen. Dr. Murchison considers that the clinical proofs of the efficacy of mercury in certain derangements of the liver are overwhelming.

THE LOCAL TREATMENT OF GRANULAR DISEASE OF THE CONJUNCTIVA.—[We have been very much interested in reading a communication in the January number of the British and Foreign Medico-Chirurgical Journal, by Mr. Ed. Nettleship, surgeon to the South-London Ophthalmic Hospital, on *Granular Disease of the Conjunctiva and Contagious Ophthalmia*. Especially have we been interested in the treatment of the former affection as advised by Mr. Nettleship, for it is essentially the treatment we learned about twenty-three years ago at Will's Hospital, Philadelphia, under those professional veterans still living, Drs. Hays, Littell, Fox, and Neill.—T. P.]

It does not seem likely that any thing will be found equal to nitrate of silver and sulphate of copper as local applications. When properly used they give results which, taking the nature of the disease into consideration, leave little to be desired. For general purposes there is nothing equal to a solution of nitrate of silver of ten grains to the ounce of water, in which strength it is chiefly or wholly astringent. This solution applied daily with a moderately large camel's-hair brush cuts short most inflammatory attacks with great certainty, and very much reduces the roughness and redness

of the lids in the chronic granular condition, unless this be of very old-standing. When the case is one of old thick granular lids, the mitigated solid nitrate often has more and better effect. At first wash off the lid five or ten seconds after thus applying the nitrate in substance with a solution of chloride of sodium (five grains to the ounce), or of chloride of zinc (two grains to the ounce), either by means of a syringe or of a large flat brush; but it will be found, after a few weeks, that in many cases the application thus made has little effect, and it will be necessary either to wait from fifteen to thirty seconds or more after applying the caustic before washing it away, or to omit washing it off altogether. The mitigated caustic should at first never be used oftener than three times a week, though some old cases will be found in which its daily application is necessary. The ten-grain solution must be used daily or three times a week, according to the effect it is found to produce. Solutions of more than twenty grains are unsafe, unless they are washed off, and when this is done they have no advantages over the solid form, and are indeed less easy to localize than the latter.

A certain number of patients do not improve under the use of silver in any form, nor even when used at long intervals; a few others are made decidedly worse by it, the congestion being permanently increased, the granulations growing rapidly and bleeding on the slightest touch. Most of these cases derive much benefit from solid diluted sulphate of copper, *lapis divinus*, applied two or three times a week or oftener, according to experience. Such as do not improve under either silver or copper will not, so far as I have seen, do so with preparations of either lead or tannin, or tannate of lead. I prefer the solutions of silver as standard applications, reserving the *lapis divinus* for those who get worse or who do not improve under the former. Those who are made worse by one will generally be benefited in a marked degree by the other. After the applications of preparations of silver or



copper cold fomentations should be used if there is much pain. They greatly relieve the present pain and the risk, which is generally greatest, I think, when the pain is most severe, of too great inflammatory action setting in.

USE OF QUININE IN THE TREATMENT OF INFANTILE DISEASES.—In a paper in the *Deutsche Klinik*, 1874, Dr. Rapmund contends that quinine and cold affusions are the most energetic and most certain antipyretics. He gave quinine in four cases of scarlet fever, eleven cases of measles, two cases of small-pox, three cases of erysipelas, nine cases of lobular pneumonia, and three of follicular enteritis. When a sufficient dose had been administered the temperature and frequency of the pulse fell, and a calm, prolonged sleep ensued. Quinine has great power in rendering the course of febrile diseases benign. In the treatment of erratic erysipelas by quinine Rapmund has been as successful as Vogel. In the treatment of lobular pneumonia of infants by quinine the author obtained seven cures out of nine cases. It is in the stage when the febrile symptoms are acute, and the temperature and pulse-rate higher than normal, that quinine is indicated. In whooping-cough quinine diminishes the violence of the attack and promotes rest at night. It also appears to prevent complication, and to render the course of the disease benign.

SPASM OR TENESMUS OF THE MUSCULAR PORTION OF THE URETHRA AND NECK OF THE BLADDER CURED BY CYSTOTOMY. M. Parona had a patient, twenty-two years of age, who contracted gonorrhea at fifteen; now had no discharge, but had vesical irritation, painful contractions at neck of the bladder during micturition; irregular, jerky stream; urine normal and without parasites; catheterism easy in the greater part of the urethra, but possible only at the region of the neck when the resistance was tired out; bladder healthy. Antispasmodics

were first tried; bromide of potassium, chloral, morphia, and belladonna rubbed into the perinæum, but with no benefit; forced dilatation of the neck of the bladder was equally unavailing. Cystotomy was then performed, and in a month the patient was well and free from his former sufferings. M. Parona presents the following conclusions: 1. Palliative means, which one should always try, are in a great number of cases absolutely inefficacious; 2. The surest treatment is incision of the neck of the bladder; 3. Cystotomy should be preferred to intra-urethral section. (British and Foreign Medico-Chirurgical Journal.)

NEURALGIAS OF THE MAMMÆ AND INDURATIONS OF THE MAMMARY GLAND.—Dr. M. Rosenthal (*Wien. Med. Presse*) states that hyperæsthesia of the breast occurs in various conditions, especially in the hysterical. Moral excitement, uterine affections, menstrual suppression, the advent of menstruation, pregnancy, constriction of the thorax, are the most frequent causes of this neuralgia, which may assume a certain intensity, appearing and disappearing with the cause which has produced it. It has also been observed alike in cancer of the breast, of the liver, and of the stomach, and in simple hypertrophy of the breast. The severest form of this affection, *mastodynia*, may be compared to neuralgia of the testicle. Nevertheless, according to Rosenthal, this neuralgia does not depend directly upon the nerves of the fourth cervical pair—superclavicular nerves—but in an indirect manner upon the intercostal nerves; and these are his reasons: *mastodynia* is often accompanied with neuralgias of the arm, of the internal wall of the axillary cavity, and of the shoulder, parts to which the pectoral cutaneous nerves are distributed. In one case he noticed neuralgia of the abdominal wall.

The first case cited by Rosenthal was of a married woman, twenty-five years old, in whom the *mastodynia* was accompanied with neuralgic pains on the inner side of the arm, and

extending to the tips of the fingers. After two years of treatment the disease yielded decidedly to injections of morphia, ferruginous diet, and sea-bathing. The second patient was unmarried, twenty-eight years of age, chloro-anæmic, and previously tormented with hemicrania and gastralgia. She suffered for fifteen months with neuralgia in each breast, with nodosities in them; often also the abdominal walls were painful. The breasts are normal in appearance, temperature remarkably low, and are very sensitive to touch. The nodosities are quite distinct, and vary in size from a hazel-nut to a chestnut. The skin is sensitive upon all the thorax, and especially around the gland. To the right of the epigastric depression there is a small nodosity, the size of a lentil, very painful to the touch. The pains were somewhat calmed by pills of aloes and asafetida administered for four weeks; then half-baths with douches, and finally general baths were directed. The smaller nodosities have disappeared, while the others have diminished in volume and in consistence.

The third patient was a boy of sixteen years, born of a very nervous mother. He had aching and twinging pains in the right breast, with cutaneous hyperæsthesia of the thorax, and hyperæsthesia of the spinous processes of the first dorsal vertebra. In this case the cause was onanism. The pains were calmed by quinia and lupuline, and a cure was effected by three months' residence in the country, where the patient took cold hip-baths with lotions upon the back.

The benign nodosities of the breast may be mistaken for cancerous growths; but the error will be prevented by considering the age of the patient, the slowness of development of the tumor, and the general condition of the subject. The commencement, the progress, the mobility, etc., will not permit confounding them with sarcomatous, fibrous, lipomatous, or hydatid tumors, nor with fibrous indurations and deep abscesses. (*Archives Générales.*)

## Notes and Queries.

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AMERICAN MEDICAL ASSOCIATION.—The next meeting of our great medical congress, as is known to our readers, will take place in this city on the first Tuesday in May; and from the indications reaching us we are confident that the meeting will not only be large, but will embrace an unusual proportion of the leading physicians of our country. The Boston Medical and Surgical Journal is urging the societies of Massachusetts to send their best men to the meeting "to make one last determined effort to aid in a commendable reform." There is an evident revival of interest in the association in every section of our country, which gives promise of the best results. We are not sure that we understand the language of our Boston contemporary about "a commendable reform," but we hail with great pleasure any evidence of a disposition on the part of the medical public to sustain our national association, assured that through it the happiest results may be expected. The association is what it is made by the profession. If the ablest men attend its meetings, they will make it worthy of the American profession. It will not be made so by staying at home and disparaging it.

"Reform" has been the watchword of a large party in the association ever since it was organized, and our respected contemporary returns to it. We do not like the term. Improvement, progress, is the word we should apply to the case. The profession wants development, growth, cultivation, advancement, not reform; and the association is set to aid and direct it in its course. We are of those who have from the beginning entertained high hopes of the association, and we are ready to affirm that it has exercised a most beneficent

influence upon the profession of our country. If it has not accomplished all that might justly have been expected of it, it is because so many, who might have enhanced the interest of its meetings and its transactions by their attendance and co-operation, have preferred to stay at home and look after their own individual interests. We expect to see in Louisville, in May next, an assemblage of professional talent which shall do full justice to its high aims.

DR. W. W. YANDELL.—The death of this estimable gentleman, who was for more than twenty-five years a leading physician of Gibson County, Tennessee, is announced in late papers from Jackson and Humboldt. Dr. Yandell was a native of Rutherford County, Tenn., where he was born, August 11, 1821. In 1846 he left his home, on Stone's River near Murfreesboro, and came to Louisville to study medicine. After two years of diligent study he was admitted to the degree of M. D., in the University of Louisville, in the spring of 1848. He was a man of a sound judgment, and became a most judicious practitioner. His moral qualities were of a character to secure him the respect and confidence of all who knew him. His valuable life was terminated by an attack of erysipelas, when he was at the height of his usefulness, and had still the promise of many years of professional activity. He died at his residence, in Milan, on the 31st of January. In an obituary notice of him his friend and neighbor, Dr. Wm. H. Stilwell, says, "Dr. Yandell's death will be mourned by the whole community, for all were his friends. Though undemonstrative and retiring in manner, his large and sensitive heart responded tenderly to every call of friendship or humanity. The writer of this knew him intimately for more than twenty-five years, and can truly say no man had more ardent friends, or possessed in a higher degree the happy faculty of attaching them to him. As a citizen, a husband, and a father, no one better exemplified the virtues of those

relations; and as a physician, not only the public but his professional brethren will unite in the plaudit, 'Well done, faithful servant of science and of humanity.' "

KENTUCKY STATE MEDICAL SOCIETY.—The next meeting of this society will be held in Henderson, commencing the first Tuesday in April. Whenever the society meets in the southern part of the state the attendance is sure to be good, and a spirited meeting may be looked for at Henderson. Ample provision has been made for literary entertainment, committees having been appointed to make reports enough to occupy the members a week, if all are prepared and read. The fact that many of its members will wish to be appointed delegates to the American Medical Association, to meet in this city the month following, will secure a large meeting.

PRIZE ESSAYS.—Dr. J. D. Jackson, chairman of the committee of the American Medical Association on prize essays, is seeking health this winter in the genial climate of Florida, and fears that he will not be able to return in time to attend to these duties. He has therefore directed that papers written for the inspection of the committee be forwarded to Dr. L. P. Yandell, at Louisville.

TREATMENT OF ERYSIPELAS.—As a good deal is being said just at this time of the manner in which erysipelas should be treated, it may not be out of place to give the rival modes of treating this disease which prevailed in the University College Hospital thirty years back: "When erysipelas was almost epidemic in the hospital, both amongst the medical and surgical patients, we had four practitioners of the highest eminence and skill treating the disease in four different and distinct ways! Elliotson was painting the patient with a strong solution of nitrate of silver; Thomson was smearing the surface over with mercurial ointment; Cooper, with his usual caution, modified the topical treatment by attempting

to isolate the disease by drawing lines of lunar caustic around the margins of the efflorescence to prevent it spreading beyond them; while Liston confined himself to the older mode of treating the disease locally by means of fomentations and the application of flour. But, notwithstanding his assumed contempt for medicine, he always administered powerful remedies internally. Belladonna at this time was much resorted to by the homœopathists, and this Liston employed, together with antimony, in what were regarded 'heroic' doses. Liston at this period was very frequently called into consultation by Dr. Quin, then the head of the 'heresy,' and was no doubt considerably influenced by the sagacity of that able and philosophical but mistaken practitioner. It was curious to listen to the clinical lectures of the four principal medical officers of the hospital, sometimes delivered the same week. Elliotson, always clear, decisive, and 'rational,' gave reasons for all he did, and justified his treatment with the nitrate of silver, and appealed to the results of that treatment. He would occasionally make a sly, good-humored allusion to the 'do-nothing' mode of treatment, but he was never coarse or ill-natured in his remarks on the practice of his colleagues. Thomson would drily, and with the most perfect coolness—as if indeed he and his colleagues had agreed to try a series of experiments on the treatment of the disease—draw conclusions from all the cases, and would analyze in his labored manner the results of the therapeutical agents employed. Cooper stuck mainly to his own cases, and if he did allude in any way to those of his colleagues, it was in a quaint, humorous style, without being offensive. He could, however, when he pleased say very nasty things in a very quiet way. Liston's impetuous temperament urged him to say very uncivil and very bitter things. He ridiculed the idea of curing erysipelas by 'turning a white man into a nigger,' or by 'drawing lines horizontally, perpendicularly, and slantingdicularly over a patient's body.'" (Autobiographical Recollections of the Medical Profession.)



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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—*RUSKIN.*

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## Original Communications.

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### TREATMENT AND REMOVAL OF FIBROIDS FROM THE UTERUS BY TRACTION.\*

BY THOMAS ADDIS EMMET, M. D.,  
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It is my belief, as the result of observation, that fibrous tumors become pedunculated only when situated at a point where the force of gravity can be exerted. This force acts as a source of irritation to excite the muscular fibers of the uterus to contraction. I have also noted that the muscular fibers throughout the whole organ do not contract equally.

From some change of structure, due to the long-continued presence of the tumor, the fibers forming the outer wall of the uterus and covering these growths lose to a great extent their contractile power. In corroboration it has been noted when marked uterine contraction is exerted an apparent sinking in of the sub-peritoneal surface takes place, corresponding in extent to the interstitial tumor beneath. If the contraction is prolonged, the extent of the depression will lessen just in

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proportion as the tumor may be forced into the uterine canal. About the circumference of this neutral space of uterine tissue, forming the outer wall of the tumor, the muscular action is more marked than at any other point—a natural result that the greatest action should be in proximity to the seat of irritation. This neutral surface, when thus encircled by a contracting band, continues to be crowded in upon as rapidly as the space below becomes vacated, and the tumor pedunculated in proportion to its advance into the uterine canal.

This depression I have felt distinctly when the uterus was in a state of active contraction; but it has been a question in my mind if any real displacement of this neutral space takes place. I am rather inclined to the opinion that a ridge is formed around by the damming up, as it were, of the contracting muscular tissue about this surface, which acts as an obstruction.

When a tumor is situated at or near the fundus we can hasten the termination of the case by exciting the muscular fibers with the use of ergot, as is the accepted practice, or we may aid the action of gravity by dilatation of the outlet or by incising the cervix.

But there are many cases where the tumor is not so favorably situated, where the action of gravity can not be exerted, and where uterine contraction, if excited, is lost and inert in displacing the tumor from its bed.

For the relief of a large number of these cases it has been my practice to excite uterine contraction by making traction on the growth. This action I have continued until the tumor becomes pedunculated from being crowded out of its bed by muscular contraction closing in around and behind the mass. As an illustration of this action we may imagine the removal of a body by traction from a mass of india-rubber, where the contractility of the substance would be sufficient to close in behind as the advance was made, and obliterate the canal on the withdrawal.

My attention has been directed to this subject for a number of years, but the development of my views to the present stand-point has been very gradual. But I can not demonstrate this progress better than to present somewhat in detail several prominent cases, which have stood by the way as so many sign-posts.

In 1863 a patient was admitted to the Woman's Hospital with a fibrous tumor distending the uterus to the size of full-term, a portion of which filled the vagina and had already begun to slough. I could form no idea by a digital examination as to its attachments. I applied a pair of forceps, with the view of delivering the mass until I could reach the base, around which I intended to have applied the chain of the *écraseur*. My efforts, however, were fruitless, as the tumor was too large above to enter the pelvis. Fearing to leave the patient in this condition, I passed, with the aid of Gouch's canula, a stout twine around the mass as high up as I could within the uterine cavity. To the end of the cord I made a slip-knot, and strangulated the mass to control the hemorrhage which I anticipated. Steady traction was made on the cord by an assistant, for fear that hemorrhage would occur should the noose become relaxed. I proceeded to remove the mass, piece by piece, with the aid of a large tenaculum and a pair of properly-curved scissors. After I had taken away a large portion I was surprised that the vagina continued to be occupied by about the same sized mass as at the beginning. But I was so much occupied with the work immediately before me that I did not notice the gradual decrease in the size of the uterus until near the close of the operation. As I advanced the cord was cut by accident. There was no bleeding, so I introduced my hand within the vagina, and proceeded with the operation by pulling down with the tenaculum portion after portion until the pedicel was reached. I thus removed the whole tumor with scarcely the loss of an ounce of blood after the traction had been commenced. I

noted the blanched appearance of the mass remained the same after cutting the cord as the strangulated portion did after the blood which it contained had escaped. It was a matter of the greatest surprise to me, for which I could offer no explanation, that the pedicel for such a mass should not have been larger in diameter than the index finger. Previous to the operation I had supposed the greater portion of the tumor was buried within the uterine tissue. At the termination of the operation the uterine canal was barely five inches in depth. The mass contained a number of cysts of various sizes, and the quantity of fluid which escaped could not be estimated, but the pieces of the tumor weighed together nearly seven pounds. The patient recovered without a bad symptom.

From this time I have seldom used the *écraseur*, but have removed with scissors any growth within the uterine canal which I could reach. I have had no fear of hemorrhage, for this case taught me that it could be controlled in the manner I have described.

A few years after this case I assisted a physician in Newark, N. J., to remove a large tumor from the uterus. A portion of the growth presented through a well-dilated os, and the lower portion of the attachment was within reach on the anterior wall, some two inches within the canal. I passed the chain around the growth, but as it was being attached to the instrument it slipped from the fingers, and it became necessary to re-apply it. The chain was again adjusted by her physician, and finally attached to the *écraseur*, after great difficulty, from the fact that it seemed to include a much larger portion of the mass than before. The hemorrhage was excessive from the beginning, and increased to such an extent that it became necessary to remove the mass as rapidly as possible. To control the bleeding ice-water was injected into the uterine cavity to excite contraction. This was promptly established, but the bleeding was not arrested, and

the condition of the patient became critical. As soon as the *écraseur* had cut through and had been withdrawn, I passed my hands within the uterus and found its cavity occupied by two tumors, the one above overlapping the other. When I applied the chain it passed between them and encircled the lower one, but a portion of both had been included in the last adjustment. Passing my hand over the abdomen, I felt a sub-peritoneal fibroid, as large as a hen's egg, on the anterior wall near the fundus and to the left. I was satisfied the uterus could not contract sufficiently to control the hemorrhage with so large a mass attached to its wall and filling its cavity. I therefore attempted to break down and tear away with my fingers the remains of the tumors. This brought on violent uterine contraction, but irregular in course, so that the organ assumed somewhat of the hour-glass form. I felt the canal suddenly encroached upon, and on placing my hand over the abdomen found the external tumor had disappeared. Involuntarily I attempted to enucleate the presenting mass by opening the capsule with my thumb-nail, when it split, and the tumor escaped so suddenly from its bed that my first impression was that rupture of the uterine wall had occurred. The uterus now contracted uniformly and rapidly, so that the remaining masses were soon removed and the hemorrhage arrested. This patient convalesced slowly from the great loss of blood, but ultimately recovered under the close watching of her physician.

February, 1867, a patient was admitted to the Woman's Hospital with a large fibrous tumor imbedded in the greater portion of the anterior wall of the uterus. The tumor encroached on the uterine cavity, but only so far as to give a marked curve to the canal, as nearly the whole was interstitial. The case was under the care of Dr. John G. Perry, then one of the assistant surgeons, who, by my advice, continued the use of sponge-tents for some two months or more. After an absence of several weeks she returned to the hospital in

consequence of continued pain from uterine contraction. The os was found dilated to some four inches in diameter, with the tumor presenting as a child's head. A broad attachment could now be felt just above the vaginal junction, somewhat less in width than the portion of tumor occupying the canal, while previous to leaving the hospital merely a uniform projection existed. June 3d I operated by passing well up into the canal a large tenaculum, and by steady traction drew down or rolled out into the vagina a large portion of the mass. I took out with a pair of scissors a large wedge-shaped portion, and as the traction had already excited uterine action, I removed piece after piece, as the tumor could be drawn down, until the uterus had been emptied. When the pedicel was divided it was less than half an inch in diameter, and was formed by the capsule covering that portion of the base of the tumor which was nearest to the uterine outlet at the beginning of the operation. The location of the pedicel at this point, I have noticed, has been without an exception. I have referred to the recorded history of the case, and find that the depth of the uterus was not noted, but my impression is that it was eight inches previous to the operation. The lower portion of the base was felt just within the cervix, and the attachment of the tumor extended from that point to the fundus. The base therefore could not have been less than seven inches in length, with a width of from three to four inches. I purposely commenced the traction as high up as possible, and away from the lower portion of the base. I excited muscular action at the fundus, where it seems always to be greater than in any other part of the organ. As I rolled out the tumor from above, its separation advanced from this point downward as the uterus contracted on the diminishing size of its contents. The portions of this tumor weighed together four pounds and a half.

A case similar to the first one given was admitted to the

hospital in 1869, in the service of Dr. George T. Harrison. The vagina was filled by a portion of the tumor, which had begun to slough, and the patient already presented the symptoms of blood-poisoning. I used a cord for the purpose of making traction in the beginning, but afterward drew down the tumor as I have described and removed it piecemeal. The pedicel was not larger than the index finger, yet previous to the operation I am certain that fully one third of the tumor was interstitial. This seemed to be the case, at least so far as the opinion could be based on the passage of the sound as an indication of the depth of the uterine canal. This tumor was also filled with cysts and their contents lost, but the portions removed weighed a little over five pounds.

March, 1874, I received from Dr. D. E. Kissam, of Brooklyn, a patient in my private hospital who had long suffered from excessive hemorrhage. She was so anæmic that for nearly a month I carefully controlled the loss of blood, and directed my attention to improving her general condition before I deemed it safe to attempt any operative procedure. The uterus was very much anteverted, enlarged at the fundus, and somewhat pear-shaped. The sound passed five inches posteriorly to the base of the tumor and three inches in front of it. When the condition of the patient admitted I dilated the uterine canal fully, and reached the lower portion of a tumor, with a base below of some three inches. Every other day I dilated the canal and passed high up within it an ergot suppository. These were made by Dr. Squibb of gelatine, glycerine, and the aqueous extract, in equivalent to one hundred grains of the powder. At night one was introduced into the rectum, and on the intervening day, in the morning and at night, they were administered by the bowel. Marked uterine contraction followed the use of these suppositories, but the effect was more decided when introduced directly within the uterine canal. A practical point has been overlooked in the treatment of these cases should it be proved that the absorbing



power of the uterine mucous membrane is always as active as it seemed to be in this instance. Iodine, for example, as we all know, is taken up so as to be detected by the taste of the patient almost instantaneously. This is the only case in which I have used these suppositories within the uterus, but do not think they could have acted merely as a foreign body, from the rapidity with which they were dissolved. The uterus became broader at the fundus, from before backward, and altered in shape so much that a projection was formed on the posterior wall as the tumor was crowded in that direction; but no advance was made toward the uterine outlet, nor did the base lessen in diameter. At the end of some ten days I felt satisfied that nothing more could be gained by delay. Although the os below was kept fully dilated, the expulsive power was lost, as in a shoulder-presentation. No advance could be made, as, from the situation of the uterus and the tumor, the action of gravity could not be exerted. I decided to remove the tumor with scissors, and placed the patient under ether; but at the end of an hour I was obliged to abandon the attempt. I could barely reach the most depending portion of the tumor with my finger, and failed in getting a loop or any contrivance around the growth by which I could draw it down. March 3d, a week after, in the presence of Drs. Kissam, George T. Harrison, and Bache Emmet, I again made the attempt. I first retroverted the uterus, and then gradually drew it down to the vaginal outlet. When necessary the uterus may be thus with safety brought within reach, if no cellulitis has existed; and it is done by gradual traction, without jerking. The uterus was held in this position by a stout tenaculum in the hands of an assistant. I then passed the index finger within the uterine cavity, as a guide, and seized with a double tenaculum the fibroid high up posteriorly. By steady traction in the course of half an hour I succeeded in drawing a portion of the tumor through the os, and for the first time was able to pass my finger around the

base. The tumor was a half-spheroid in shape, situated near the fundus in the anterior wall, about three inches in diameter at the base, and unusually dense in structure. To give more room I removed with the scissors the portion which had been drawn out from the os. I introduced my hand within the vagina and the fingers into the uterine cavity, and made traction on the mass with a tenaculum in the other hand. I requested Dr. Kissam to place his hand over the fundus to steady the organ and press it down into the pelvis. The uterus was now contracting with great force, and as I crowded my fingers in around the base to aid the process of pedunculation, if I may use the term, I could feel the contracting wave passing in a spiral or an oblique direction around the uterine walls. The muscular contraction was more marked immediately around the base, as it seemed to crowd up on the tumor. Suddenly Dr. Kissam informed me that the uterus was becoming inverted, and I noticed at the same time that the base of the tumor was lessening in diameter. I passed my hand over the abdomen, and as the uterus contracted I could feel the cup-like depression distinctly through the relaxed abdominal wall. I was pleased at the prospect of the inversion, for I felt satisfied after enucleating the tumor I could easily replace the uterus. I therefore redoubled my efforts to bring about this condition, but noticed the size of the depression diminished as the base of the tumor became smaller. This depression may have been accidental, or it may have been more marked in consequence of the violent uterine contraction, and in extent would necessarily bear a relation to the size of the tumor imbedded beneath. These are points which must be settled by future observation. But in watching this case, with my fingers encircling the base of the tumor, while the uterine tissue was contracting around it, I realized for the first time the manner in which a growth becomes gradually pedunculated as the force of gravity comes into play. It was now evident to me that the traction which I had practiced for years,

without appreciating cause and effect, had produced the same result. I also appreciated that the uniformly attenuated pedicel which I had always noticed had been a natural result of the traction I had employed, and not accidental. Early in the operation I called the attention of the gentlemen present to the appearance of the portion of the tumor which I had drawn out beyond the labia. As I made traction, to excite the muscular action of the uterus, the mass became blanched, and remained so as long as the action was kept up. After the uterus, however, had begun to force the tumor out of its bed, this bloodless appearance became permanent. In this case, as is the rule, the pedicel was formed at the lowest point of the base nearest to the uterine outlet. It was unusually small, and when divided was not larger than an ordinary lead-pencil, and yet the base was about three inches in diameter at the beginning. This was fully appreciated by the gentlemen who assisted me, for on making the examination but a slight pit or depression could be detected with the finger to mark the point of attachment. The operation lasted an hour and a half, and when completed the uterus was three inches and a half in depth. After the operation I carefully replaced the uterus with the finger to its normal position in the pelvis. This patient made a rapid recovery, and within a week has visited me in perfect health.

December 8, 1874, as I was about to commence my clinic at the Woman's Hospital, Dr. Whitwell, the house surgeon, informed me that he had been obliged to substitute a patient just admitted for operation, whom I had not examined. While she was being etherized I learned that during her last labor, three years previous to admission, her physician had been obliged to remove a large growth from the uterine cavity, which had obstructed the delivery. Menstruation had been free, lasting a week; and for a profuse leucorrhœa, with a constant bearing down and backache, she had sought relief. The doctor had examined the case and reported the existence of a

large mucous polypus projecting from the os uteri. The speculum exposed a soft vascular growth as large as an English walnut, with an attachment to the posterior lip almost as great. There had been double lateral laceration of the cervix, and although this growth was outside of the uterine cavity, it really sprang from a surface which formed a part of the cervical canal before the accident. The appearance of the tumor was unusual, and led to farther examination. I found the uterus very wide from before backward for its apparent depth, and from the rectum detected a deep depression near the fundus, as if from inversion. But the passage of the sound forward five inches indicated the presence of a fibrous tumor in the posterior wall, extending nearly to the fundus without encroaching on the uterine canal. The growth was very soft, and bled profusely in consequence of the tenaculum tearing out on making the slightest traction. I therefore resorted to my favorite means for the purpose—a cord with a slip-knot. The tissue of the pedicel, which had been drawn out, was dense, and I soon discovered that it was inclosed within a sheath having an origin beyond the submucous surface. I divided with the scissors the sheath around the supposed pedicel close to the uterine surface, and proceeded to make traction as I separated the tissues with my index finger. I was soon satisfied that it was a portion of the fibrous tumor occupying the posterior wall of the uterus; and, having advanced so far, I had no alternative but to enucleate the whole tumor. In the course of half an hour I succeeded in drawing out from its capsule a mass some four inches in length, round, and of nearly uniform thickness throughout of an inch and a half in diameter. In the beginning, while making steady traction, I confined myself to separating the tumor from its capsule as it presented itself at the opening. The hemorrhage was profuse, and increased so rapidly when I had withdrawn about half of the tumor that I hastened the operation by introducing my finger and breaking up its attachment

in advance. After the mass had been removed I found the cavity was two inches and a half in depth, with the remaining posterior wall of the uterus so thin that I was surprised it had not been ruptured. An equally thin septum existed in front, between the cavity and the uterine canal, which had not been entered. The traction had excited the muscular uterine tissue to action, and the size of the organ had materially lessened; but the posterior wall being so thin, the contractile force seemed lost in that direction. Notwithstanding the depth of the cavity had been shortened an inch and a half, it was my impression its capacity had been but little diminished, since its width was greater than that of the tumor after its removal. A portion of the capsule presented at the opening, which I seized with a tenaculum, and drawing down all which was loose removed it with the scissors. The patient was now placed on the back, over a bed-pan, and the cavity washed out with a quantity of very hot water by means of a Davidson's syringe. She was afterward replaced on the left side, and Sim's speculum introduced, as at the time of the operation. The cavity was dried by a large sponge probang, and as soon as it was withdrawn two drachms of Churchill's tincture of iodine was injected. By use of the hot water the size of the cavity was greatly reduced and the bleeding diminished, but the iodine contracted it still more, and entirely arrested the hemorrhage. Some pledgets of cotton saturated with glycerine were introduced into the cavity, now about an inch and a half in depth, and the vagina was moderately tamponed with cotton dampened with a solution of alum. On the second day after the operation all dressings were removed and the cavity carefully syringed out with warm water, to which had been added some carbolic acid. This treatment was continued from day to day without a bad symptom presenting, and the cavity rapidly decreased in size. December 19th, eleven days after the operation, the temperature suddenly rose to  $103^{\circ}$ , and symptoms of blood-poisoning were detected. A specu-

lum examination was made, and a sloughing mass exposed, which at first glance appeared to be the posterior lip. I found that it was a portion of the capsule protruding, behind which a cyst had formed containing about two ounces of a thick gelatinous fluid. After puncturing the cyst I removed the remains of the capsule by means of scissors and by tearing it away with a strong pair of forceps. There was some bleeding, but the quantity was not excessive. Curiosity prompted me to pass my finger to the bottom of the cavity, when I detected another fibroid, a little smaller than a pigeon's egg, just projecting sufficiently to map out its size. This I seized with a strong tenaculum, and as traction was made by Dr. Whitwell I cut it out from its bed with a pair of curved scissors. The uterus contracted promptly on its removal, and it was beyond question due to the presence and position of this little fibroid that the cavity had not been more reduced in size at the time of the first operation. I again injected the iodine, and as it excited the uterus to further contraction, the bleeding was entirely arrested. January 7th, I found the cavity from which this tumor had been removed now obliterated and the uterus three inches deep. On the 12th instant she was discharged cured from the hospital.

The pathologists teach us that these growths have a uniform origin and a similarity of structure, into which the uterine tissue becomes incorporated. Yet from observation I had become impressed with the belief that so soft and vascular a growth, as in this instance, had always its origin and extent limited to the submucous tissues. I have met with but one other instance where this condition was an outgrowth from the dense tissue of a true fibrous tumor. I did not recognize the connection at the time, and although the case has no bearing strictly on the mode of treatment under consideration, yet its teaching is of great practical value to the subject at large.

June, 1871, I dilated the uterus of a patient in the Woman's



Hospital, and detected near the fundus a soft tumor, about an inch in diameter, which I considered a mucous polypus partially pedunculated, and the cause of hemorrhage. On the anterior wall, near the fundus to the right, was felt through the abdominal wall a subperitoneal fibroid a little smaller than a hen's egg. This tumor seemed to one side, and accidental in its connection with the growth within the canal. Dr. T. G. Thomas, a member then of the consulting board, was present, and examined the case at my request. From its shape and position it was impossible to encircle it with the chain of the *écraseur*, and too soft to be drawn down with a tenaculum sufficiently within reach of the finger as a guide for its removal. I therefore decided to destroy it by cutting open with a pair of scissors the portion protruding, and I believe the procedure met with Dr. Thomas's approval. The operation was easily done, and by the injection of iodine the slight bleeding was promptly arrested. The discharge was very profuse after the third day. To guard against blood-poisoning I directed the nurse to introduce the nozzle of the syringe just within the patulous os, and gently wash out the uterine cavity at the time of administering the usual vaginal injections. This was done for a week or ten days, and the patient was apparently doing well. One morning, during the administration of the injection, the patient suddenly complained of great pain and discomfort. On removing a nearly-empty bed-pan the nurse realized that some serious accident had occurred, and I was sent for. The patient died in a few days from a violent attack of peritonitis. The post-mortem disclosed the fact that the subperitoneal fibroid had become displaced, leaving a smooth opening, as if made with an inch-auger, from the uterine canal through the fundus into the peritoneal cavity. The tumor was found lying behind the uterus in a bed of lymph. It was soft, and the portion which had been imbedded in the uterine tissues was ragged and sloughing. Over the opening through the fundus the intes-



tines had become adherent in the attempt to repair the injury. At the time I supposed two distinct growths had existed, and in their development the intervening uterine tissue became absorbed, so that they lay in contact. It was thought, as the growth within the uterine cavity disintegrated, the capsule of the outer tumor became involved and loosened from its attachment, so that it was at length easily displaced by the injection.

Now it is evident to my mind, in connection with the growth of the previous case, that there existed but a single tumor. I am also satisfied that in the Newark case the supposed subperitoneal fibroid was nearly imbedded in the uterine tissue to the mucous membrane of its cavity. Fortunately by the uterine contractions which were excited the tissues crowded up upon the tumor so as to force it in the direction of the canal, and, although leaving so thin a septum of uterine tissue beneath the peritoneum, the cavity was soon closed up by the rapid decrease in the size of the uterus.

The practical bearing is obvious that in addition to the risk from blood-poisoning the practice is not a safe one to remove, as is frequently done, a projecting mass within the cavity without any knowledge as to its depth within the uterine tissue. When we can make traction it matters little how thin the outer wall of the uterus may be, provided we are able to excite the muscular tissue to contraction, since the space will be closed up as rapidly as the mass is withdrawn. This will surely be the case where we have a single tumor, especially if it be situated near the fundus, or even in the lateral wall, if its size be not so large as to have replaced the greater portion of the true uterine tissue. There is certainly a limit to procedure, but it is safer and is appreciable to every case where a prudent operator would feel justifiable in attempting enucleation by any method. I deprecate the practice of separating the tumor from its capsule before withdrawing it where muscular action is not excited, or to so

limited an extent that a large cavity is left from which the patient is exposed to the danger of blood-poisoning, if she does not sink from the loss of blood beforehand.

It is even more hazardous to cut into the mass, or excite inflammation within its structure by the use of the cautery or other agents, with the view of bringing about disintegration; for no man possesses the means of limiting to the tumor the inflammatory process which he will establish by this mode of treatment. Should the sloughing stop short of breaking down with the tumor, the outer uterine wall covering it, the progress has been stayed in every instance by a special interposition of Providence. Were we as familiar with the death record as we are with the result where the treatment has been survived, no conscientious man would ever attempt to destroy a uterine tumor by disintegration.

A few words in relation to the after-treatment. After the tumor has been removed, and all shreds or loose portions within reach, it is important to wash out the cavity thoroughly. It is best to use very hot water; for not only is it a prompt exciter of uterine action, but by prolonging the injection we thoroughly empty the capillaries within reach of its direct influence. After the injection we possess no better means of increasing the contraction, and of maintaining this condition, than by the free application of Churchill's strong tincture of iodine. Should there be any oozing of blood after the hot-water injection, the application of iodine is certain to arrest it, without there exists some impediment to the proper contraction of the uterus. It is an agent I have employed for this purpose more than ten years, and it is a most valuable antiseptic. I am confident that we possess no better means as a prophylactic when used as I have employed it.

Under no consideration would I introduce the persulphate of iron into a cavity to arrest hemorrhage. It possesses in itself no styptic properties, and only coagulates a mass of blood, which then acts mechanically. The blood is so

destroyed in character by contact with the persulphate that it undergoes decomposition within a few hours. From this source the patient frequently becomes blood-poisoned before any septic element has been generated elsewhere. It acts as a local irritant, and it is impossible to get rid of it until removed by suppuration. After injecting the iodine I sometimes pack in a little cotton saturated with glycerine. If more than this is needed, it is better to use damp cotton, which has been saturated with a strong solution of alum, and the tampon vagina tamponed with the same material. On the second day I carefully remove the cotton; and if there is no bleeding after washing out the cavity, I dispense with all dressings. It is necessary to devote the utmost care to cleanliness by frequent injections of warm water. To these injections may be added a little brewer's yeast as a stimulant and disinfectant, or carbolic acid, if there is any tissue undergoing decomposition. Finally I keep the patient in bed until the cavity has filled up, if a tumor has been enucleated, or until all discharge ceases from the uterine canal, if a polypus has been removed.

My experience in this mode of operating would recommend it on the score of safety. I have not lost a single patient, after the removal of growths from the uterus, in over eight years, during which time I have regularly employed the method. The only case during this period in which I deviated from my practice, by cutting into the growth and leaving it to break down, died. The details of the case I have already presented. I must state, however, that I have never enucleated so large a fibrous tumor before as the case I have presented, for I have not been favorably impressed with the results following the usual methods of operating which have passed under my own observation in the practice of others; but I have safely removed a number of small fibroids where death has frequently occurred under other circumstances. I have also operated many times by traction in pedunculating tumors which have begun to project into the canal. Formerly,

when I have operated under like circumstances, I have lost patients from blood-poisoning in the breaking down of the portion left imbedded in the uterine wall. It has been my practice, when the growth was larger than a pigeon's egg, to confine my efforts entirely to controlling the hemorrhage, and aiding the action of the uterus in forcing the tumor from its bed toward the canal. When it had projected sufficiently I then removed it by traction. I have always been very conservative in my views regarding any surgical interference with large fibrous tumors involving a greater portion of the uterine wall. While I am likely still to hold these views to a great extent, my recent experience may justify me in extending the field to a larger number of cases than formerly.

NEW YORK.

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## ON THE DISEASES OF CHILDREN.\*

BY BERNARD TAUBER, M. D.

The very great mortality incident to infancy and early childhood invests the study of the diseases of this period of life with great importance. In France, Germany, and England, where registration laws exist, it has been shown that in the first year of life eighteen deaths occur in every hundred; in the first month, ten. In this country, with the exception of some of our cities, we have no precise knowledge of the annual number of births and deaths. In New York City fifty-seven per cent of the deaths occur under five years, and twenty-eight per cent under one year. A million of births occur each year in France, and at the expiration of a year no fewer than two hundred and fifty thousand of these children are dead.

\* Read before the Southwestern Kentucky Medical Association.

The causes of this remarkable mortality are in many cases unavoidable; as, for example, malformations of internal organs and certain forms of hereditary disease. The peculiar susceptibility of the infant organization to morbid influences is another cause, while still another is the fact that certain diseases are peculiar to infancy. Preventable causes are those which arise from neglect or ignorance of hygiene, impure air, improper food, want of suitable clothing, etc.

To the anatomist the infant is a miniature man; to the physiologist a man incomplete as to some functions. To the pathologist there are some marked differences; the anatomical lesions, for example, of pneumonia in the infant are not those marking this disease in the adult, while the tendencies of this disease in its progress are more to a chronic character in the young than in the mature; and a similar statement may be made as to pleurisy and entero-colitis, the latter being especially remarkable from its tendency to take on the chronic form; and the extraordinary susceptibility of the infant's nervous system is exhibited in the occurrence of convulsions from causes which would produce slight or no disturbance in the adult organism. In general terms, it may be stated that the anatomical lesions of the diseases occurring during the first stage of infancy are less purely inflammatory than the diseases of the second stage of infancy and those of the adult; they are more destructive, it is true, but death is less frequently the result of the material disorders which they produce than of the blow given to a weak organization.\* The affections of early infancy differ, moreover, in many ways from those of the adult: the ready action of exciting causes; the rapid progress of symptoms, and the precipitate terminations of the same; the exaggerated reaction, which quickly becomes lowered; and finally the feeble plasticity of the inflammation, which gives to the organic lesions a special character.†

Hufeland has remarked that the time elapsing between

\* Bouchut.

† *Ibid.*

birth and the expiration of the first year is the continuation of a creation, of which the first half has been accomplished within the mother, while the second half is effected upon her bosom; and similarly Bouchut observes that the life of an infant is not a normal state, but a progress toward it.

A physiological process apparently so simple as dentition is frequently the cause of local or of general disease, the latter form sometimes termed *sympathetic*; and this fact illustrates the great susceptibility of the infant organism to the action of an irritant cause. Among the general disorders that may result from dentition are usually mentioned those of the brain, of the skin, and of the gastro-intestinal canal. But so far as disturbance of the stomach and bowels is consequent upon this process, the disorder may frequently be accounted for by the too great quantity or improper quality of the food given the teething child to quiet its cries. Suffering with the pain and irritation of the advancing tooth, it greedily takes any thing that may be offered to eat or drink, or is perpetually dragging upon the mother's breast, draining away a milk that possibly is deteriorated by this constant demand, or by the mother's weariness and anxiety; and hence the infant's power of digestion is weakened and the stomach overloaded. Nature rebels against such practice, and the stomach rejects its contents; but too often the warning is not understood, and the same injudicious cramming is again permitted or pursued; and to gastric irritability is added, or succeeds, intestinal disorder, an entero-colitis which is very liable to become chronic, and ultimately prove fatal.

Certain difficulties attend the diagnosis of children's diseases. Even when a child has learned to speak it can not always tell its painful sensations, nor will it to one whom it does not know, or to one whom it fears. The physician must have *tact*, kind and gentle ways, if he would win his way to a child's heart, and obtain its confidence. But even the infant—the etymology of which indicates one who can not



speak, *infans*—not yet having acquired articulate language, has another mode of expressing its feelings and making known its condition. “Before speech God has given the infant a language which the philosophers call natural language; it is a language of signs.” It is our duty to learn these signs not merely from reading, but from patient observation; to study them with as much assiduity and a profounder interest than the ambitious linguist gives to the acquisition of a new language.

In the treatment of no class of diseases is a recognition of their causes, and the removal of those causes, more important than in those which we are considering. Remembering that many of these disorders originate and are perpetuated by plain violations of plain hygienic laws, our first care will be to see to the enforcement of such laws; to look to every thing pertaining to the food the infant takes, the clothes it wears, the air it breathes, its bathing, sleeping, etc.

Another principle of great importance in the treatment of these disorders is to relieve pain. The pain which might be endured by an older person without serious harm possibly will be in the infant the starting-point of convulsions, which may prove fatal, or else leave behind them organic mischief from which the subject never fully recovers; and at best keeps the sufferer wakeful and restless, inducing more or less exhaustion, and then too disturbing the rest of others. And among all the agents for the relief of pain, quite as much for children as for adults, no one is comparable to opium. Undoubtedly this agent must be used with discrimination as to the condition of the patient, for it is the patient rather than the disease which we should treat. Nor is it merely as an anodyne that opium is of great importance in the therapeutics of infancy and childhood, but also for its influence in certain inflammatory disorders; to wit, inflammation of serous membranes. Possibly too in the advance of our knowledge in the treatment of some other inflammations this agent will



be found equally useful. Possibly there is too much timidity manifested by some practitioners as to giving opium to infants, some refusing to give it at all, and seeking unfaithful substitutes in conium or hyoscyamus. It may be questioned whether, admitting the serious consequences of its injudicious use, vastly greater evil would not result were all to entirely abstain from using it.

Promptness of treatment is another principle which should not be lost sight of. Many a child has died from convulsions arising from indigestible food in the stomach, whose life might have been saved by an emetic administered an hour sooner than it was.

Another principle that may be mentioned is persistence of treatment; persistence because there are few conditions so desperate that recovery may not ensue; persistence because in the rapidity with which vital processes take place in infancy and childhood pathological products that would be permanent in the adult may be completely removed, and the integrity of organs and functions maintained.

PADUCAH, KY.

## Reviews.

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**A Practical Treatise on the Medical and Surgical Uses of Electricity.** By GEO. M. BEARD, A. M., M. D., etc., and A. D. ROCKWELL, A. M., M. D., etc. Second edition, revised, enlarged, and mostly rewritten, with nearly two hundred illustrations. New York: William Wood & Co. 1875.

When the old Greek critic pronounced "a great book a great evil" he had in his mind books on speculative philosophy, books of poetry, and the like; not such works as this, for in his times natural science was despised. To understand the books of which he spoke one was obliged to read them through. It was a task to master them; and when all they taught was understood, the reader had nothing but ideas for his labor. They gave him no power over nature. His taste, his imagination, his logical faculty, his acquaintance with human nature might be enlarged, but he had gained no knowledge of the science of phenomena.

This is a book which makes its readers wiser in matters that pertain to health. It imparts a knowledge which is practical, and which possesses the additional charm of novelty. The science of which it treats is one that owes its development to our own age. Medical electricity, especially electricity as a surgical agent, is a discovery of late years, and Dr. Beard and Dr. Rockwell have collected into the volume before us the most important facts bearing upon the subject. They have produced a thoroughly compendious work, which the publishers have brought all the resources of their art to make complete. One is at first somewhat alarmed at its size—a royal octavo of nearly eight hundred pages—but as

he looks through it and sees the number of topics discussed he is soon satisfied that it is not too large. It constitutes a sort of encyclopedia in fact, to which the reader may refer for information on any point pertaining to electricity, whether its history, its medical and surgical applications, the several forms in which it is applied, or the various instruments employed in practice. If its authors are a little disposed to exaggerate the remedial powers of electricity, somewhat over-sanguine as to its capabilities, the effect will only be to draw more attention to the subject, and cause this wonderful force to be applied oftener by physicians; and this is a thing very much to be desired.

The history given of electro-therapeutics is full of curious interest. Beginning with our great philosopher, who drew electricity from the clouds, the era of Franklinic electricity, the authors bring their account down to the present day; and no feature of the subject is more remarkable than the change in professional opinion respecting the therapeutic value of electricity. Less than ten years ago, they inform us, their friends warned them against touching the subject. "To apply or even suggest the application of electricity," they say, was regarded as "a folly, if not a crime. Although every fool was not an electrician, yet every electrician was *prima facie* a fool."

This picture doubtless is somewhat overdrawn, and in this connection we would venture a little criticism on the style of some portions of this book. While it is generally unexceptionable, there are specimens of grandiloquence that might be pointed out which the authors would do well to expunge in their next edition. We would specify a paragraph on page 245, in which the following sentences occur: "Science is not a matter of geography; it knows no distinction of language and no boundaries of race. Higher than the mountains and deeper than the sea, it embraces all its disciples in one common brotherhood." This spread-eagle style ought to be left

by these clever authors to sophomores and fourth-of-July orators. It is unworthy of a solid work of science such as they have given to the world.

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**Dental Pathology and Surgery.** By S. JAMES A. SALTER, M. B., F. R. S., Member of the Royal College of Surgeons, etc. New York: William Wood & Co. 1875.

We have here a book on dentistry by an English surgeon, printed in London, in a fair type on beautiful paper, and published in New York. It is very much the old story of "carrying coals to Newcastle" to bring a work on dentistry to the United States. Of all the four quarters of the globe we suppose America is richest in literature relating to the teeth. Dentistry is the specialty of specialties in our country. Our dentists have taken the lead in all the arts pertaining to their profession. In mechanical ingenuity we think it will be conceded they beat the world. An American dentist discovered anæsthetics. Still we have no doubt our dentists will welcome the appearance of this scholarly and scientific treatise by Mr. Salter, for scholarly and scientific it certainly is in an eminent degree. We can heartily recommend it to our brethren in the country, who are obliged to be dentists as well as physicians, surgeons, and obstetricians. They will find it a most valuable guide.

In the extraction of teeth Mr. Salter finds use for the key, an instrument once so generally employed, in but a single case; namely, "where the first or second lower molar tooth is very carious on the outer edge, the decay descending below the gum and leaving an unsound surface for forceps, and with a neighboring tooth standing on each side." To these narrow limits he would restrict the use of the key.

Hemorrhage after extraction of teeth sometimes proves serious. It is to be treated by local and by constitutional

measures, according to its character. Styptics and constant pressure constitute the first; internal astringents are indicated where the hemorrhage depends on a constitutional vice. A plugging compress, as recommended by Hunter, is the plan now universally adopted. Sometimes restoring the extracted tooth to the socket has been tried with success. Tannin, spirits of turpentine, and tincture of muriate of iron are the internal remedies mentioned.

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**Transactions of the American Medical Association.** Vol. XXV. 1874.

The American Medical Association enters upon the twenty-fifth year of its existence with a volume marked by some new features at least, whatever may be thought of their value. For the long, formal, and often formidable reports on medicine, surgery, medical education, etc., which made up so large a part of former volumes, we have in the volume before us addresses on the practice of medicine, surgery, obstetrics, and on many other practical subjects, without any notice of medical education. We believe the judgment of the profession will be that this is the best volume yet issued by the association, and we are very confident that future volumes will indicate a still higher effort on the part of its members. The best minds in the profession of our country will in the end be drawn into the association, and it will become a true representative of American medicine. But for the work already accomplished by it let it have the credit due. It has entitled itself to the gratitude of every physician in our country; for it can not be denied that the strenuous efforts of the association to advance the profession have been attended with marked results.

## Clinic of the Month.

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THE TREATMENT OF AORTIC REGURGITATION.—Dr. Geo. W. Balfour, in the last of a series of clinical lectures of extraordinary interest on diseases of the heart, says in reference to the management of aortic incompetence:

“First of all we put the patient to bed, and endeavor to get him as nearly recumbent as possible, so as to diminish the height and consequently the distending power of the arterial column. With this view we also deaden his sensibility by the administration of chloroform, chloral, or morphia, either by the mouth or subcutaneously. The orthopnœa, which is so distressing a feature of this disease, has reference solely to the congested and œdematous condition of the lungs, and is established by nature to give the patient’s respiratory muscles a better purchase in elevating the chest-walls. A wise physician knows that, however dangerous the condition of the respiration may be, the patient runs much more risk from the state of his heart. He does not argue the point with nature, but he calms her instinctive fears with the means at his command, and he feels that he has gained a victory for science when he has got the patient fairly recumbent. The inexorable mechanics of the circulation are then appeased, and we have leisure to attend to the physiological part of the difficulty. So intricately involved, however, are all our vital actions that as we can not appease the mechanical part of the difficulty without advantage to the physiological part, so also we can not remedy the physiological portion without also benefiting the mechanical portion. It is advantageous therefore to carry out both parts of our treatment at once; and,

though to the superficial thinker such a plan has the appearance of an empirical treatment of symptoms, a deeper knowledge of mechanics and of physiology, and of their mutual interdependence, will show that we are really employing scientific means according to scientific method, and that we apparently thwart nature only the better to secure the ends she aims at; thus conclusively proving the superiority of scientific art to empirical nature. While we therefore attempt by getting the patient down to lower the height of the distending column, thus at once relieving the cardiac circulation and diminishing the pulmonary congestion, we simultaneously endeavor to produce a similar relief by diminishing the area of the base of the arterial column; and this, so far as our present therapeutical armamentarium extends, we can only do by means of one drug—digitalis. It is not so long since this drug was regarded as a pure sedative to the heart; the opium of the heart, it was euphemistically termed. Now, thanks to experimental physiology, we certainly know that its action is widely different from that of opium, and greatly superior to it so far as preservation of life in this disease is concerned. It is still regarded by many as not merely useless, but positively dangerous, in the disease of which I speak—aortic regurgitation; and yet there is no other disease in which this drug is of more value, and no other in which its curative action can be more efficiently demonstrated than in this. In very large doses digitalis is employed as a sedative in many diseases, such as delirium tremens, pneumonia, etc.; but experimental physiology has shown us that such a method of inducing what our American cousins call sedation is an extremely dangerous one, as it depends upon the fact that the stimulating blood-supply is cut off by an extreme degree of ventricular contraction, which falls just short of the ordinary fatal result of digitalis-poisoning—death with the heart in systole. A full dose of digitalis maintains, however, its sedative action for some time without by any means proving fatal.



The almost fatally-contracted condition of the ventricle is not therefore the result merely of one or two energetic contractions which again relax, but is the result of a tonic contraction of the ventricle, which is excited only to a certain pitch by a certain dose of the drug, and beyond this it does not pass unless the dose is increased, nor does it greatly relax for some time, till the effect of the drug passes off. The ordinary employment of digitalis teaches us the same thing. If we gradually increase the dose at regular intervals, or if, employing a large dose at first, we persist in its use, similar phenomena occur. First we have a gradually-increasing fullness and firmness of the pulse-beat and of the ventricular systole, and then a falling off of both; smallness of pulse, feebleness of heart-beat, irregularity, and finally fatal syncope with the heart in systole. There is a regular gradation between these two extremes. So long as we employ small doses we may go on administering them daily for years, as is often done in mitral disease, without any fear of untoward result, without any dread of cumulative action; but the instant we employ large and powerful doses the difficulty of regulating the action of the drug becomes extreme, and we require to watch its action very carefully, and suspend it on the very earliest indication of its poisonous action.

“The useful employment of digitalis in aortic incompetence is purely a question of dosage. In a few months or a few years we shall be able to regulate it with much greater nicety than at present, with more comfort to ourselves and more safety to our patient; at present we must risk something for the sake of an otherwise unattainable benefit. What we desire to produce in each case is just such an amount of tonic contraction of the ventricle as shall rather more than counterbalance the dilating power of the arterial column. If our patient is obliged to be upright, a larger dose will be required than if we can lay him flat; and the larger the dose required the more carefully it must be watched. The dose must be accommodated to the

circumstances of the patient, and regulated by them, as well as by his idiosyncrasy; for some are more susceptible to the action of the drug than others.

“In the employment of a drug where accurate dosage is of so much consequence as in this it is of importance to have a preparation of uniform strength, and in this respect I have found the ordinary tincture all that can be desired. The ordinary infusion is not so uniform, nor is the crystallized digitaline so reliable. The latter is very convenient for subcutaneous injection when rapid and immediate action is necessary, but it can not be so certainly relied upon as the tincture. In the cases already related the doses of the tincture have varied from five to ten minims every four hours; but I have frequently doubled or tripled these doses, and sometimes even gone beyond that with benefit. In fact, though commencing, as you have seen, with small doses (five minims) of this drug, and trusting somewhat to other tonics, I now trust mainly to digitalis, giving fifteen minims up to half a drachm of the tincture every four hours; and in one very remarkable case of persistent threatening of complete asystole I was only enabled to get the patient out of the infirmary and sent home, a distance of a hundred miles, by the continuous use of half-drachm doses of tincture of digitalis every two hours for several days.

“The use of digitalis is always accompanied by greater or less increase of the flow of urine. So long as this keeps up we are—I speak from experience—quite safe to continue its use. When employing moderate doses of digitalis the flow of urine may halt or diminish without fear of untoward result; but in using large doses we must look upon the mere halting of the flow of urine as an indication to us to watch the pulse with great care several times a day; and if at any time it commences to thump or to falter, or if nausea be induced on movement, we ought at once to pretermit the use of the drug. With this precaution I have never found the use of the

drug in this disease, even in these large doses, productive of any thing but relief, a relief unattainable by any other means I know of.

"Tincture of the perchloride of iron is in many cases a useful adjunct, as it helps to improve the blood and assist in the nourishment of the cardiac muscle; but now and then it disturbs the stomach, and must be omitted. It never is of so much consequence as digitalis, and a good supply of animal food may fairly enough replace it. The liquor arsenicalis stands in a different category. It is not only a hæmic tonic, but it is a special tonic to the cardiac muscle, and in moderate doses rarely disturbs digestion.

"In aortic incompetence the compression to which the ventricular muscle and its vessels are subjected give rise, as we have seen, to malnutrition. Neuralgia is said to be the prayer of the nerves for better blood; hence neuralgic pain is a frequent accompaniment of this disease. In all forms of cardiac angina arsenic is almost a specific, and in this form it certainly acts with great benefit. At present we can only employ it empirically; but it is not so long since digitalis was only employed for a similar reason, and we confidently look forward to a time when the use of arsenic in cardiac neuralgia shall be justified by accurate physiological reasons. Of course it is occasionally advisable to conjoin the use of these remedies with that of others possessing certain other specific actions, such as diuretics, purgatives, etc.; but these are to be used *pro re nata*, with reference to the individual case, and not to the disease generally. All such patients require to be nutritiously yet moderately fed, because the defective aortic pressure reacts injuriously on both the gastric and hepatic secretions, and limits both their supply and their efficiency. Ordinary alcoholic stimulants are of great use in such cases, moderately supplied, but their employment must be watched and regulated. They are only of temporary value to tide over a weakly period, and by no means possess the

permanent value of such special cardiac stimulants as digitalis, arsenic, or even iron."

TREATMENT OF ITCH.—Dr. Tilbury Fox, in a recent lecture, says, concerning this much-vexed question:

"There is no need to apply parasiticides to parts in which acari do not exist, because the irritation and eruption elsewhere are due to sympathetic action; and these irritated parts will get well if the acari be destroyed, and they do not require the use of irritant remedies, such as parasiticides are, but soothing remedies.

"My rule is this: if the disease be recent, if it be only slightly marked, if it began about the hands, and there be no cuniculi about the penis, I order the parasiticide to be rubbed into the interdigits, the palm of the hand, and the wrists, and I apply a soothing lotion to all other irritable parts of the body. If, however, there be—I am speaking of the slighter degrees of the disease—cuniculi about the penis as well as the hand, and especially if the disease appeared to begin coincidently in point of time by itching about the lower part of the abdomen, then I apply the parasiticide to the hand and the penis; but even here I do not rub in the remedies very long (for three nights and three mornings); and I only, for precaution's sake, let the patient smear the parasiticide upon the scrotum and the thighs, and for two or three times. I then order a soap-bath, a change of linen, and I expect my patient to be quite well. The absence of pruritic irritation at night on the third day I take as a good test to the cure of the disease. In no case do I use any but parasiticides of moderate strength. Half a drachm of sulphur to the ounce of lard is a sufficiently strong ointment, if sulphur be the remedy chosen.

"In bad cases no doubt the acari are disseminated widely, and active treatment is needed. One remedy in common use is the sulphur-bath. I think a caution is needed as regards

its use. I believe that it is abused. Though I much prefer a good soaking in a sulphuret-of-potassium bath, and the prescription of a mild parasiticide ointment, yet sulphur vapor-baths may be employed; but I think a single one properly administered—at most two—sufficient. I would have the patients well washed first of all with soap and water, and then put into the sulphur-bath. If the effect be that the pruritus at night is destroyed, I do not think it needful to repeat the bath, especially where the skin is much inflamed. These baths have cured scabies in many cases, but have set up a severe inflammation and pruritus in the skin that are most difficult to subdue. I never use sulphur vapor-baths in itch on that account, except where the disease is of the severest kind, because I believe all the acari can be destroyed by simpler and less irritating applications. In these cases the same rule holds good, I think, as in the simpler cases. It is easy to overtreat these cases. If at the end of a few rubbings with mild sulphur or storax ointment the skin be less inflamed, less irritable, the vesicles and pustules drying up, and the patient get a good night, I consider that the itch itself is practically well, and I then treat by parasiticides the usual haunts of the acari and soothe other parts. But there is another very important matter in these cases. It is to keep the same linen on next the skin during the use of the parasiticide, and when a change of linen is made to disinfect all the clothes by heat.” (*British Medical Journal.*)

**SUPRACONDYLOID AMPUTATION OF THE THIGH.**—At a recent meeting of the Surgical Society of Ireland Prof. W. Stokes read a paper on this special form of operation, and again drew attention to the advantages which he considered might be claimed for it. He presented casts of the stumps resulting therefrom in seven cases which he had himself operated on, and also a cast of a stump from a case of Mr. Richardson's, upon which that gentleman had performed the operation with

a most successful result. Prof. Stokes's paper contained the particulars of the two last cases upon which he had performed supracondyloid amputation, according to the rules laid down in his former communication to this society, May, 1870. In both these cases the operation was undertaken in consequence of necrosis of the upper third of the tibia, with synovial effusion and thickening in the knee-joint, and for extensive necrosis of both bones of the leg respectively. Both patients recovered well, and with good, shapely, and useful stumps. The success of the operation depended upon the site of the femoral section, which should be from half to three quarters of an inch above the articular cartilage. The medullary canal was not thereby opened, and the liability of the split patella tilting upward obviated. To prevent the latter tendency Prof. Stokes had in the last cases he operated upon stitched the surfaces of the two bones together with carbolized cat-gut sutures, and left the ligature in. The advantages which Prof. Stokes claimed for this operation were twofold: first, those peculiar to the situation at which it was performed; and second, those peculiar to the operation itself. In the first category might be enumerated the circumstances that the stump obtained was more useful than that from other amputations of the thigh, and the danger and shock of the operation less; that there was diminished liability to the formation of tubular sequestra; that pressure could be borne on the face of the stump, and that the patient could walk without appearing as if he had ankylosis of the hip-joint. The special advantages were: 1. The posterior surface of the anterior flap being covered by synovial membrane, there was less danger of suppuration and of purulent absorption; 2. The possibility of the patella slipping was prevented; 3. The existence of an osseous covering to the cut surface of the femur; 4. The vessels were divided at right angles; 5. The diminished liability to sloughing of the anterior flap from its being covered with synovial membrane, and also the resulting rounded-cone form of the



stump, which had no tendency to become conical; 6. The preservation of the normal attachments and functions of the extensors of the leg. In conclusion, Prof. Stokes remarked that as yet the mortality after this operation in Ireland had been *nil*, and that he had received most favorable opinions as to its advantages from several surgeons.

In a discussion which followed Prof. Stokes's paper Dr. Corley said he had recently performed Mr. Carden's operation, and was not pleased with the results, as two ugly projecting pieces of bone were left, and the flap being brought close to the sawn end of the bone, the consequences might be imagined. In Prof. Stokes's operation this pressure on the flap was obviated. Instead of stitching the bones together, as had been done by Prof. Stokes, he would suggest section of the rectus and cruræus muscles, so as to prevent the tilting up of the patella.

Professor Macnamara had performed the supracondyloid operation in a very unpromising case with most satisfactory results. The splitting of the patella was accomplished with the greatest ease.

Mr. H. G. Croly thought that the operation brought forward by Prof. Stokes was more suited for cases of necrosis, or of severe injuries to the bones of the leg, than for cases of diseased knee-joint; the synovial membrane, which was utilized in the supracondyloid amputation, being diseased in cases of "white swelling." As regards the mortality of operations in this situation, he had not lost one of the several cases of Teale's amputation he had performed.

Mr. B. Wills Richardson said, to prevent tilting forward of the patella in the case in which he had operated on according to this method, he had divided the tendon of the rectus; a proceeding which did not weaken the power of the stump, and which he preferred to putting a ligature through the small portion of the patella left after the removal of its articulating surface.



Prof. Stokes, in reply to the question if the patella was diseased in any of his cases, said he would hesitate to divide the extensors muscle if possible. In his last case there was extensive disease of the soft tissues, but the knee was not diseased in any case. (*Irish Hospital Gazette.*)

SHAMPOOING IN THE TREATMENT OF SPRAIN.—Prof. Broca does not believe in the efficacy of absolute rest in sprains, and attaches great importance to shampooing. Its omission in ordinary practice was much to be regretted, and it would in some measure account for the success of bone-setters. M. Broca expresses his surprise that the subject is so lightly treated by writers, and took occasion to explain what shampooing was, and its mode of action in the treatment of sprains, etc., as follows: “Primary shampooing” consisted of pressing or kneading the swollen tissues with the fingers, then of alternately flexing and extending the joints affected. By this pressure and forced motion the extravasated liquids are dispersed into the subjacent cellular tissue. After the first shampooing the pain and swelling return; but on the second day, when the operation is repeated, its effects last much longer, the pain is diminished, and after a few days, during which the operation is regularly practiced, the pain and œdema disappear completely. “Secondary shampooing” is applicable to cases that had not been treated, or imperfectly so, in the first instance, and in which the pain, swelling, and inability to move have persisted. In such a case he would begin with gentle frictions, which are to be gradually increased, and to be applied to the most painful parts.

The counter-indications against this mode of treatment consist of acute inflammation of the parts; as in such a case the operation of shampooing would not only be intolerable, but would increase the inflammation. In all cases of sprain the utmost care and attention should be paid with the view of forming a diagnosis, as it would be unpardonable in any

surgeon shampooing a fractured limb, a practice not infrequent among quacks and bone-setters. In case of doubt better treat the patient upon ordinary principles than to resort to the cruel and unscientific method of shampooing under such circumstances. After each sitting he applies a roller steeped in goulard or some other resolvent lotion, and enjoins rest, absolute or otherwise, according to the nature of the case. (*Ibid.*)

THE BROMIDE OF IRON IN CHOREA.—Professor Da Costa, in a recent clinical lecture on this subject (Medical and Surgical Reporter), says, “Having now used it for three or four years, my experience from the treatment of a large number of cases, giving abundant opportunity to witness its good effects, induces me to like it better than any other one article in the treatment of chorea. It should be given in increasing doses, never commencing with less than five grains for a child, and rapidly increasing the dose to twenty. It may be given in plain syrup and water in the form of a pill, or better, in an effervescing powder. It not only affects the chorea, but also impresses the nervous system as a sedative, quieting it, and giving the patient rest. It is also a valuable agent in treating the incontinence of urine in children. It was in a case of this kind, complicating chorea, that I first observed its value; being surprised and pleased to see that, as the symptom which led to its administration improved, the chorea also diminished and soon disappeared. Since then I have used it almost continuously. Local chorea, or clonic muscular spasm, such as twitching the eyelids, etc., in hysterical women, are sometimes cured by this drug after the failure of other remedies. In answer to the question whether it is the bromine or the iron that benefits, I think it is the combination; that neither *alone* accomplishes the result; for you will find it to benefit cases that have previously taken iron without improvement; and as regards the other bromides, we certainly can not claim

for them any especial value in chorea, as they frequently disappoint us. The remedy occasionally fails, as all remedies sometimes do in this obstinate affection, but it certainly is one of the most valuable agents we possess for the treatment of chorea."

DYSENTERY CURED WITHOUT OPIUM.—Dr. J. H. Carstens, in a paper in the *Detroit Review of Medicine and Pharmacy*, says, "Dysentery being an 'infectious febrile disease,' due to a specific poisonous germ, and quinine being the best remedy to destroy and neutralize the specific poisons, it ought to be good for dysentery. Ulceration being a prominent result of dysentery, as quinine diminishes ulceration, this is the remedy. Hemorrhage is a prominent symptom, and as ergot contracts the smaller blood-vessels and prevents hemorrhage, that is the remedy. Severe spasms and tenesmus being most complained of by the patient, and ipecac being most emphatically an antispasmodic, it is good for dysentery. The proportions of these remedies in each suppository should be regulated by the symptoms. 1. By means of suppositories we can cure dysentery; 2. This is the most rational and scientific mode of treating this disease; 3. Children object less to their use than to nauseous drugs administered by the mouth; 4. And that probably quinine, ergot, and ipecac are the best remedies to use at present at our command." The following is the formula used by Dr. C. in a child five years old:

R. Pulv. ipecacuanhæ,	. . .	ʒss;
Pulv. ergotæ,	. . . . .	gr. xv;
Quinæ sulph.,	. . . . .	gr. iv;
Olei theobrom,	. . . . .	q. s.

For twelve small rectal suppositories. Introduce one every two hours.

SUBHYOID PHARYNGOTOMY.—Langenbeck has now performed this operation twice; one case recovered and one died. The

method followed is thus described: The first step is tracheotomy, after which a sponge is used to plug the larynx and prevent the blood entering the trachea during the further steps of the operation. This done, the incision along the lower border of the hyoid bone is made, reaching from one omohyoid to the other. The fascia and sternohyoids having been divided, the thyrohyoid membrane and finally the mucous membranes are cut, and the epiglottis thus exposed is drawn forward by forceps. When the cut is properly made the larynx is found to drop away to some extent from the hyoid bone. The superior thyroid artery and nerve are not in the way in making these incisions. When the larynx is thus drawn forward the interior can be inspected, and any growths removed by the usual means. The author thinks the operation indicated where (*a*) foreign bodies in pharynx, situated in the pharyngo-laryngeal cavity, can not be removed by the mouth; (*b*) tumors in this part of the pharynx are seated with broad basis in the mucous membrane, or in the wall of the pharynx between the mucous membrane and the muscular layer; (*c*) growths exist on epiglottis, aryteno-epiglottidean ligaments, or arytenoid cartilages.

MASSAGE IN ABSCESS OF THE CORNEA.—Dr. Osio, of Barcelona, recommends the application of massage in abscess of the cornea. Donders called attention, in 1872, to the practice as one that had yielded him excellent results. Dr. Osio has employed massage of the cornea with success in certain diseases of the eye. He combines the use of aqueous vapor with massage by the following method: an apparatus charged with an infusion of camomile is placed before the patient's eyes (which have previously been covered with a double layer of fine muslin) at such a distance that the vapor reaches the eyes at a temperature of from 90° to 100° F. At the same time massage of the eye should be performed with the fingers over the muslin, rubbing it up and down, from side to side

and finally by a circular movement pressing upon the center of the cornea. At intervals the apparatus may be brought nearer, so that the eyes may for a few moments be subjected to steam of a higher temperature than that indicated. This vapor-bath should be continued for half or three quarters of an hour, and during this time the massage should be repeated from eight to ten times, with a duration of from one to two minutes upon each occasion.

IS MERCURY A CHOLAGOGUE?—In a paper by Dr. Charles Murchison on the treatment of functional derangements of the liver, in which he reviews in his calm and philosophic way the action of various drugs on the liver, he thus speaks (*British Medical Journal*):

“The results of experiments upon the lower animals have added greatly to the discredit previously thrown upon mercury by its failure, when brought to the test of accurate clinical observation, to absorb plastic lymph in most forms of inflammation; and some eminent physicians are even of opinion that mercury and its preparations ought to be erased from our pharmacopœia. On the other hand, it has been fairly objected that the results of experiments with mercury upon dogs do not warrant conclusions as to its effects upon man; and even granting that in man mercury does not increase the quantity of bile secreted by the liver in health, it does not follow that in disease there may not be some condition adverse to the formation of bile, which mercury may have the power of removing. Much, however, of the difference of opinion between the physiologist and the practical physician may be reconciled by keeping in mind the osmotic circulation as constantly going on between the intestinal contents and the blood. A large part of the bile secreted by the liver and thrown into the bowel is constantly being re-absorbed, to reach the liver again; and accordingly, when the common bile-duct is tied and a fistulous opening into the gall-bladder

established, the quantity of bile which escapes from the fistulous opening immediately after the operation is much greater than at any time subsequently. (Schiff.) Mercury and allied purgatives produce bilious stools, by irritating the upper part of the bowel and sweeping on the bile before there is time for its re-absorption. The fact of mercury standing at the bottom of the scale of cholagogues in Röhrig's experiments is accounted for by its surpassing other cholagogues in this property; for, of course, the larger the quantity of bile that is swept down the bowel, the less is re-absorbed and the less escapes from a biliary fistula. That mercury does act especially upon the duodenum is proved not merely by the large flow of bile which follows its action, but by the fact, discovered by Radziejewski, that leucin and tyrosin, which are products of pancreatic digestion, under ordinary circumstances decomposed in the bowel, appear in the fæces after the administration of mercurials. It would appear then that mercury by increasing the elimination of bile, and lessening the amount of bile and of other products of disintegrated albumen circulating with it in the portal blood, is after all a true cholagogue, relieving a loaded liver far more effectually than if it acted merely by stimulating the liver to increased secretion, as was formerly believed, and as some authorities still maintain; for in this case it might be expected to increase instead of diminish hepatic congestion. It is not impossible also that the irritation of the duodenum by calomel and other purgatives may be reflected to the gall-bladder, and cause it to contract and discharge its contents, and thus account in part for the increased quantity of bile in the stools.

"There are also, I think, grounds for believing that, apart from its increasing the discharge of bile from the bowel, mercury exerts a beneficial action in many functional derangements of the liver, in whatever way this is to be explained. Patients of the greatest intelligence suffering from hepatic disorders constantly declare that they derive benefit from



occasional or repeated doses of mercurials, which no other medicine or treatment of any sort confers; and the skepticism of the most doubting physician would, I believe, be removed should he unfortunately find it necessary to test the truth of their statements in his own person. It is not impossible that the good effects of mercury on the liver and in some forms of inflammation may be due to its property of promoting disintegration. Mercury appears to have the power of rendering effused fibrin less cohesive, and so more easily removed by absorption than it otherwise would be. Modern physicians of high standing, and little likely to be accused of credulity as to the beneficial action of drugs, have thought that mercury is useful in croup, by causing a degradation and disintegration of the plastic membrane. If this be so, it seems not improbable that mercury, which from experiments we know to reach the liver, may under certain circumstances act beneficially by promoting or in some way influencing the disintegration of albumen. The remarkable effect of mercury on constitutional syphilis probably admits of a similar explanation. But in whatever way it is to be explained, the clinical proofs of the efficacy of mercury in certain derangements of the liver are to my mind overwhelming. I say so the more advisedly because I was taught to regard mercury as a remedy worse than useless, not only in hepatic diseases, but in syphilis. It can not therefore be said that the convictions forced upon me by experience are the result of preconceived opinions."

ON SALICYLIC ACID.—We extract the following from a paper, by Dr. E. R. Squibb, read before the Medical Society of the State of New York, February 2, 1875:

"Salicylic acid is in minute broken acicular crystals, which give it the appearance of a granular powder, soft and smooth under the pestle or knife, but somewhat rough and resinous when rubbed between the fingers. This powder is odorless and nearly tasteless. It has, however, a sweetish and astringent



gent after-taste, with slight acidity in the fauces, but none in the mouth; and, though tasteless, it leaves a disposition or inclination to expectorate which continues for some time.

"It is practically insoluble in cold water, but is very soluble in hot water; and the water of a hot solution retains when cold, in proportion to its coldness, from about one part in two hundred and fifty to one part in five hundred of the solution. The presence of various neutral salts in small proportion in the water render it far more soluble. Up to this time phosphate of sodium seems to have been chiefly used in Germany to render it more soluble in water for medicinal purposes, and it is said that three parts of phosphate of sodium will render one part of the acid easily soluble in fifty parts of water. It is much more soluble in alcohol and ether than in water. It melts at about  $125^{\circ}\text{C.}=257^{\circ}\text{F.}$ , and sublimates at about  $200^{\circ}\text{C.}=392^{\circ}\text{F.}$  In common with other similar acids it forms salts with the principal bases, but these seem thus far to be difficult to make, and their effects have not been investigated.

"It is used for medical and surgical purposes, either dry or in solution. When used dry it is sprinkled on wounds, ulcers, or dressings, in the form of very fine powder, in very small quantities, either simply powdered or mixed in various proportions with some diluent, such as starch. When used in simple solution, either for spraying surfaces or for washes or gargles, it is used in tepid solution of about one part to three hundred parts of water. Where stronger solutions are required for washes, gargles, or to moisten dressings, one part of the acid and three parts of phosphate of sodium to fifty parts of water have been used. When applied to wounds it appears immediately in the urine.

"Its alleged advantages over all other antiseptics are: 1. It is far more powerful and effective in smaller quantities. 2. It is in all quantities, necessary for complete effectiveness, entirely devoid of irritant action upon the living tissues. It is not

caustic nor corrosive in any quantity, and never produces inflammation. In large quantities it may be irritant and painful, but yet rarely surpasses a stimulant effect, while it appears to be quite neutral in the very small quantities, which are yet thoroughly effective. 3. It is said to reach and prevent processes of decomposition which are beyond the reach of all other antiseptics or antiferments. These processes are of two kinds; namely, vital, or those in which living organisms have an important part, such as that produced by yeast, and many of those which occur in putrefaction; and chemical, or those which occur independent of vitality, as the production of the volatile oils in mustard and bitter almonds, the effect of disease, etc. Now, while carbolic acid and other antiferments are azymotic, or completely arrest or prevent fermentations of the first kind, they are powerless with the chemical processes. Salicylic acid is said to be more effective with the vital ferments, and equally effective with the chemical. 4. In quantities said to be thoroughly effective it is entirely odorless and tasteless and harmless, while it has no poisonous effect in any reasonable quantity.

"Professor Thiersch, of Leipsic, used it upon contused and incised wounds and in operations with excellent general results, destroying the fetid odor of cancerous surfaces and pyæmic ulcerations. To such uses this writer would add the suggestion that for washing out the cavities of the abdomen and chest after those operations which tend so strongly to septicæmia, solutions of salicylic acid would seem to offer very great advantages, should it prove to be as bland and unirritating as it is stated to be, and yet so effective.

"If now salicylic acid shall prove more potent than the phenols the farther gain will be very great, and the researches upon it will again lead up toward future discoveries of still greater power."

## Notes and Queries.

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COMMENCEMENT EXERCISES OF THE THIRTY-EIGHTH ANNUAL SESSION OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE.—The Medical Department of the University of Louisville closed its thirty-eighth annual session by conferring the degree of Doctor of Medicine on one hundred and thirteen gentlemen. The *ad eundem* degree was conferred on the following gentlemen: C. W. Parsons, M. D., Kentucky; Cicero Buchanan, M. D., Tennessee; J. Q. Bigelow, M. D., Indiana; Henry Jamison, M. D., Indiana; A. B. Brookins, M. D., Florida; J. J. Johnson, M. D., Indiana.

### PRIZE-WINNERS.

Dr. D. T. Bridgforth, of Mississippi, the Faculty gold medal for the highest standing in the general examination for graduation.

Dr. Benjamin F. Frishe, of Kentucky, the Faculty silver medal for the student standing second in the general examination for graduation.

Dr. Edward R. Anthony, of Georgia, the gold medal offered by Captain W. C. Hite to the member of the class exhibiting the best proficiency in physiology. Drs. B. F. Frishe, W. M. Mason, and J. H. O'Reilly (a first-course student), of Kentucky, attained figures in the examination but a fraction below the successful contestant.

Mr. H. B. Kurtez, of Kentucky, a first-course student, the prize by Prof. J. M. Bodine, a gold medal, to the student exhibiting the best attainments in anatomy. Drs. N. B. Bristow, of Illinois; B. F. Frishe, of Kentucky; D. T. Bridgforth, of Mississippi; L. J. Powers, of Alabama; J. W. Kennedy, of Tennessee; and H. W. Glasscock, of Kentucky, well and eminently deserve honorable mention in the order named.

Dr. Felix Coblens, of Kentucky, the gold medal offered by Capt. J. W. Goslee to the member of the class who should prepare the best book of notes on Prof. L. P. Yandell's lectures on therapeutics. The book prepared by Dr. J. H. Hickman, of Kentucky, in contesting for this prize is so meritorious that Professor L. P. Yandell presents him a copy of Professor Austin Flint's work on Practice.

Dr. Dryden Johnson, of Tennessee, a first-course student, the gold medal offered by Capt. Z. M. Sherley to the member of the class who should pass the best written examination on "The Phenomena of Malaria." Of the contestants, ten in number, several were so nearly at par with the gentleman who won the honor that there was some difficulty in awarding the first place. They earned in the order named the merit of honorable mention: J. H. O'Reilly, of Kentucky, a first-course student; Drs. I. A. Shirley, C. R. Wilson, Benj. F. Frishe, John F. Spangler, A. C. Schuman, Thos. J. Clark, J. A. Pate, and B. S. Read, of Kentucky.

The gold medal offered by Col. S. B. Churchill was awarded to Dr. B. B. Taliaferro, of Virginia, for the best notes on the surgical lectures of Prof. R. O. Cowling.

Dr. George R. Dawson, of Tennessee, a case of instruments, by Prof. John E. Crowe, for the best examination in obstetrics and diseases of women and children. Drs. D. T. Bridgforth, of Mississippi; H. W. Glasscock, B. S. Read, J. W. Baughman, James H. Ashlock, of Kentucky, and J. L. Powers, of Alabama, Prof. Crowe thinks worthy of honorable mention.

Dr. A. Shirley, of Kentucky, the prize by Prof. Crowe, "Barnes on Diseases of Women," for the second best examination on the same subjects. Dr. W. M. Mason, of Kentucky, so nearly tied Dr. Shirley in this contest that Dr. Crowe duplicates the prize.

Dr. Benjamin F. Frishe, of Kentucky, the prize, a pocket-case of instruments, offered by Messrs. Arthur Peter & Co., wholesale druggists of this city, to the member of the class who should show the greatest proficiency on the subjects taught by Professor Holland.

Dr. D. T. Bridgforth, of Mississippi, the case of surgical instruments offered as a prize by Mr. Simon Jones, of "The Pharmacy" in this city, for the highest proficiency in operative surgery on the cadaver. Drs. J. N. Baughman and J. H. Page, of Kentucky, won honorable mention in contesting for this prize.

The valedictory was by Prof. D. W. Vandell, M. D., and was as follows:

*"Gentlemen:* 'To preserve the living and make the dead to live, to keep men out of their urns and discourse of human fragments in them, is not impertinent unto our profession, whose study is life and death, who daily behold examples of mortality, and of all men least need artificial mementos or coffins by our bedside to remind us of our graves.' These are the words of Sir Thomas Browne, who was one of the luminaries of our profession two hundred years ago. Your studies heretofore have related to the living, and your business hereafter will be chiefly with them. We hope it will be a long time before you are troubled much with questions relating to the dead. In one sense, however, and that a very important one, the question as to the proper disposition of the dead concerns especially medical men. The subject of sepulture has become in some parts of the world one of deep concern as bearing upon the health of communities; and as men crowd more and more into cities, it must in time claim the anxious consideration of a much larger number. As guardians of the public health, physicians must indicate and enforce the hygienic bearing of the subject. To us, it is true, the question has no present interest, and for ages to come it is not likely to press upon our people. And yet even here in Louisville it has assumed a practical shape; for since the town was laid out two public cemeteries have been filled and closed, and the city is fast stretching around and beyond our beautiful Cave Hill. But in countries where the population is dense it is already a question of most serious magnitude how they shall dispose of the dead in such a way as not to affect injuriously the health of the living.

"Rest is the thought suggested by death. The body after 'life's fitful fever' seems to be at rest. The luster of the eyes has fled; the muscles are rigid; the countenance has lost its animation. All appears to be in a state of repose. But it is not rest. Every moment of life was one of ceaseless activity and change. At no period from birth to the closing hour was it for a moment the same body. The living particles that composed it in infancy had been exchanged for other particles in youth, and those that formed the buoyant body of the young man had given place to others in the frame bent by age. Rest in all its pilgrimage there was none; and after death, when at last all seems to be still, a new arrangement of the elements which constituted the frame is begun. The

hydro-carbons that entered into its composition are resolved into the more simple forms of carbonic acid and water; the nitrogen compounds are converted into ammonia; the sulphur and phosphorus enter into new combinations, and the more perishable parts soon disappear. The bones, slower to yield to the disintegrating forces, crumble at last under the action of water and the atmosphere, and return to dust. Nothing in the end remains of the wonderful organism to distinguish it from the inorganic bodies among which it was entombed. The body seems to have perished. Not only has life become extinct, but all the blocks that framed the glorious temple have been removed and scattered to the winds or mingled with the elements from which they were derived. It seems as if destroyed. To the eye the work would appear to be one of annihilation; and so the ancients thought when they gave the bodies of their friends to the funeral-pyre. They fancied that they were destroying them, and that no base or common use could ever afterward be made of what had once been a noble and revered frame. But the fire was only resolving more rapidly the cherished remains into their original constituents, effecting in an hour or two what the slow chemical processes would have required years or centuries to accomplish in the grave. In either case the elements composing the body are only changing their relations; they are scattered, not annihilated. As in life the waste particles had escaped only to enter upon new offices, feeding vegetables, which were to become in turn the food of animals, so these products of decay are diffused abroad on the air or mix with the soil to form the nutriment of plants. No power short of the Omnipotence which created matter can ever destroy a particle of it; and by the power which called living matter into existence it has been ordered that it shall be perpetually useful as well as active. Every liberated atom that leaves the bodies of animals, and of god-like man with the rest, by a fiat of the Creator goes unerringly to minister to the wants of other organisms. Dying vegetables sustain the life of animals, and animals returning to dust vegetate again in succeeding generations of plants. One kingdom supports the other, as generations of plants minister to the growth of those that follow.

“‘Lo! all grow old and die—but see again  
How on the faltering footsteps of decay  
Youth presses—ever gay and beautiful youth,  
In all its beautiful forms. These lofty trees  
Wave not less proudly that their ancestors  
Molder beneath them.’”



“Whether we will or not, as the effete matters of our bodies go in life to nourish vegetation, after death the bodies themselves must return to the state in which they become subservient to the vegetable world. ‘Nature,’ as Sir Henry Thompson puts it, ‘will have it so, whether we like it or not. She destines the material elements of my body to enter the vegetable world on purpose to supply another animal organism which takes my place. She wants me, and I *must* go. There is no help for it. Nature hides no talent in a napkin.’ Whether the body wastes away in the grave or is consumed speedily by fire, the final result is the same.

“The question of a change in the present mode of disposing of the dead having been recently much discussed on the other side of the Atlantic, and cremation having been very seriously urged by the writer just quoted, as well as by others, as a substitute for interment of the body, it may not be uninteresting to give some thought to the subject at this time.

“Burying, burning, embalming; these are the three modes adopted by humanity for the disposal of its dead. I might stop, if time permitted, to describe what has been called the more ‘phantastical’ modes of disposing of the body after life has left it, as that of the Indian Brahmins, who burnt themselves alive, one of which strange people amazed the Athenians by throwing himself upon his funeral-pyre and exclaiming, ‘Thus I make myself immortal;’ or that of the Egyptians, who, afraid of fire, endeavored to preserve the bodies of their dead by precious embalmments and inclosures in glass; or that of the Chaldeans, who, though idolaters of fire, abhorred, it is said, the burning of their corpses as a pollution of that deity; or that of the Scythians, who, rejecting all interment, made their graves in the air; or that of the Persians, who, caring only for their bones, gave their flesh as food to dogs and wild beasts; or that of the Musselman, who affects the grave, and requires it to be of such size that he may rise in it to his knees, and there fight the final battle between the white and black angels. But I shall confine myself to the two methods of simple inhumation and cremation, and especially to the latter.

“There can be no doubt that the earliest mode was interment. The example of Abraham and of the patriarchs proves it, if we reject the tradition according to which Adam was buried near Damascus, in Mount Calvary. It is in this way that the remains of the great Israelitish leader and law-giver, Moses, were disposed



of, as we learn by the hot contest between Satan and the archangel about his body. The practice was to bury their dead out of their sight. But cremation also prevailed at an early age, and to no inconsiderable extent. Homer gives noble descriptions of funerals at which the bodies of his heroes were consumed by fire. That of Patroclus, the friend of Achilles, is one of the most imposing.

"The scene is a military camp. The troops, weary after a day of hard fighting, are gathered in silent squads around their bivouac-fires or lie sorrowful in their tents, for Patroclus, flower of warriors, has fallen by the hand of the crested Hector. His bleeding corpse lies in the tent of his foster-brother Achilles. On the glowing hearth a huge tripod is quickly placed, in which water is heated to wash the bloody stains from the manly form of the hero. When this has been done the body is anointed with rich oil, and the gaping wounds closed with an old and costly ointment. The body, wrapped in fine linen, is then transferred to a couch, and over all is spread a white mantle. Achilles, unable to restrain his grief, seeks the beach, throws himself down among his Myrmidons, and prays that the voice of the murmuring sea may drown the fierce tumult raging in his breast. Slumber at last enfolds him. The soul of Patroclus comes to his side, and in sorrowful tones entreats that their bones shall not finally lie apart, but be gathered in one receptacle, the golden urn given to Achilles by his mother.

"With the morning comes an order from Agamemnon, king of men, that a corps of the army proceed to the forest and gather wood for the mighty pyre that Achilles has designed for his friend. The wood is brought and heaped in a vast pile, a hundred feet in length and of equal width. Slowly and sorrowfully the body of Patroclus is borne from the tent and laid upon the pyre. There it is covered with the locks of the Myrmidons and the amber hair of the disconsolate Achilles. With it are deposited the heads of two favorite hounds, the fat of a score of oxen, twelve fiery steeds, and the bodies of twelve noble Trojan youths captured in battle and now slain in honor of the occasion. The torch is applied. All night long the flames leap to their devouring task, and the coming day reveals that their work is done. Dark-red wine is poured upon the still glowing embers. The somber ashes of the wood are lifted from the whiter ashes of the bones, and those lying in the center of the pyre are carefully separated from the others and gathered into a golden vase. This is wrapped in a double fold of caul and

placed in a fitting tomb, there to rest till others of equal rank with Menaetides shall become shadows; and these last sad rites concluded, the army gives itself up to races and to games.

"I might, if time allowed, give you from Homer the description of another funeral which quickly followed this—that of the noble Hector, celebrated within the walls of Troy—but I must pass on to describe a similar scene among another people.

"On the 18th of March, in the year 44 B. C., there was seen in the Roman Forum a gorgeously-gilded chapel, toward which a mournful procession was advancing. At the head of the procession, as chief mourner, was an ex-consul. Behind him, on a couch inlaid with ivory and strewn with vestments of gold and purple, a body was borne by some of the most illustrious men of Rome. It was the body of one who had been the 'foremost man of all this world.' He had led armies in Europe, Asia, and Africa, and wherever he marched victory marched by his side. For one of his campaigns he had received the honor of a triumph of fifteen days, an honor which had been accorded to no general before. Two years after this he had been honored with a triumph of twenty days. In a few years more a triumph of forty days had been decreed. The senate had saluted him with the title of father of his country, and had decreed that his triumphal car should be borne by horses of the sacred color—white—and that his figure in ivory should be borne in procession among the images of the gods. As great in peace as in war, he had after subduing his enemies turned his mind to great plans for the good of his country. He had proposed to make a digest of the Roman laws, to establish libraries, to drain marshes, to dig canals. But his career had been cut short by a band of assassins, who had plunged twenty-three daggers into his body. The assassins had proposed to throw the body into the Tiber, but had been prevented by fear. For several hours the mangled body had lain neglected where it had fallen, for the attendants of the great emperor had fled with the rest. At length three of the attendants had ventured to take up the corpse and convey it to the pontifical mansion in the Forum; for the murdered man at the time of his death was *pontifex maximus*. Here his agonized wife threw herself on the still bleeding body, and by a tearless grief bore mute testimony to the extent of her loss. His cold form was laid in the great hall, from all sides of which his long line of illustrious ancestors looked down upon it. Messengers

were dispatched for Antistius, the surgeon, who came and made careful examination of the wounds. He pronounced but one of the twenty-three stabs fatal; that had penetrated a vital organ, and Cæsar had died of hemorrhage.

“The senate had felt itself compelled to decree a public funeral. A pyre had been constructed in the Field of Mars, outside of the walls of the city; for the laws forbade cremation within the walls. But the funeral-oration was to be pronounced in the Forum, and the chapel had been erected toward which the sad procession was moving. At the head of the couch on which the body was placed lay the toga pierced by the daggers of the assassins. The people had been invited to offer for the pyre garments, jewels, spices, and the order in which they were to come had been prescribed; but so great was the rush to make offerings that the police had been unable to maintain order, and the offerers came by any route they chose. When the couch was set down the body could not be seen, but an image of wax was turned round by machinery, so that all could see the three-and-twenty wounds. And now the chief-magistrate of Rome ascends the rostra to deliver the funeral-oration. He recites the decrees of the senate, which declare sacred and inviolable the person of the murdered man, and he points to the mangled body before them. After a burst of feeling he girds his robes closely around him, advances to the bier, and chants a hymn to the body as the image of a god. ‘Thou alone, Cæsar, wast never worsted in battle. Thou alone hast avenged our defeats and wiped away our disgraces. By thee the insults of three hundred years have been avenged. Before thee has fallen the hereditary foe who burnt the city of our fathers.’ All now turn their eyes to the bloody image, and the groans of men and the shrieks of women drown the voice of the orator. Suddenly seizing the toga which hung over the body, he opens it and shows the rents made by the murderers’ daggers. And now the excitement of the people becomes uncontrollable. They cry out that the body shall not be taken to the Field of Mars, but that it shall be burned within the city. Some point to the shrine of Jupiter Capitolanus, others to the palace from which the hero’s spirit ascended to the gods. But now men come rushing forward bearing tables, beams, benches, whatever could be found in the adjoining buildings. Suddenly two young men, with swords by their sides and javelins in their hands, apply the torch. The excited multitude think that in the

young men they have seen Castor and Pollux doing honor to their hero. Upon the blazing pile the musicians throw their brazen instruments and splendid dresses, the soldiers their armor, the matrons their ornaments and even the golden bullæ which hung from the necks of their children, while the multitude feed the flames with oils and scented woods. A cry arises, 'Let us seize the brands and fire the traitors' houses!' and crowds of infuriated men, with blazing brands, rush forth toward the dwellings of the chief-conspirators. When the pyre has been consumed the remaining embers are quenched by wines, the ashes of the bones are separated from the ashes of the wood, reverently washed, wrapped in linen, deposited in a vase of a material befitting the rank of him whom the Romans placed among their gods.

"Examples of cremation among the Hebrews are related in the Scriptures of the Old Testament. Thus we read in Amos that Moab burned the bones of the king of Edom into lime; and in the first book of Samuel it is related that 'when the inhabitants of Jabesh-Gilead heard of that which the Philistines had done to Saul, all the valiant men arose and went all night, and took the body of Saul and the bodies of his sons from the wall of Bethsham, and came to Jabesh, and burnt them there. And they took their bones and buried them under a tree at Jabesh, and fasted seven days.'

"From what has been said you will see that cremation, as practiced in ancient times, was effected at a considerable cost of fuel at least; and on this account it has been objected to by a Frenchman, who declares that if all the ancients had been burned the moderns would have frozen to death for want of wood to make their fires. Recent ingenuity, however, has obviated this objection, and made it possible not only to reduce the body to ashes quickly, but with the consumption of an exceedingly small amount of fuel. Yet, with all that the most improved reverberatory furnace can do in that way, I question whether any real saving has been effected over the plan adopted in the case of Isaac, who, as we read in sacred history, carried his pyre on his shoulders.

"Among other objections to inurning the remains of the dead, some one has declared that if the previous dwellers in the world had all been preserved in vases, there would not now be left standing-room for those now alive. Sir Henry Thompson has answered this objection by proposing to scatter the ashes at once upon the fields,

that they may immediately pass to their destined uses. All bodies do not, it appears, burn equally well. The poisoned soldier mentioned by Plutarch 'put out two pyres when his belly broke.' To avoid such accidents it has been suggested to add the body of one woman to the bodies of eight or ten men, as being more inflammable, and therefore likely to make things warmer.

"The only instance of cremation in this country of which I have any knowledge occurred many years ago, and in the person of a noted citizen. I am indebted for an account of it to my learned colleague, Dr. Bell.

"Henry Laurens was one of the wealthiest merchants of Charleston. When the revolutionary struggle commenced he was in Europe superintending the education of one of his sons. He immediately returned home, threw himself with great vigor into the contest, was one of the foremost patriots of South Carolina, and enjoyed the unbounded confidence of Washington. He was elected a delegate to the Congress of 1776, and was elected president of that body. In 1779 he was sent as minister plenipotentiary to Holland; but, having been captured by a British vessel, was confined to the Tower of London for fourteen months. The British authorities made him many offers to abandon the cause of his country, but they were all spurned. Soon after his release Congress appointed him one of the commissioners to make a treaty of peace with Great Britain, and in 1782, in conjunction with Franklin and Jay, he signed the preliminaries of the treaty.

"It is known that the distinguished South Carolinian made a will which contained the most positive commands for the burning of his body. The reason for this strange order is not generally understood. Laurens had a daughter, one of the loveliest of the girls of South Carolina. When about fifteen years of age she apparently died, and was shrouded and placed in a coffin for burial. The coffin was open, and lay in a room fronting the bay. A number of her friends, young ladies and gentlemen, were sitting as watchers of the corpse. As one of the ladies walked near the coffin she was startled by a slight movement of the body, and her actions drew the other watchers to the coffin. They were soon convinced that Miss Laurens was alive. The family were summoned and prompt measures taken for her resuscitation, which were successful. She afterward married Dr. David Ramsey, the patriot and historian, and an eminent physician of Charleston. Laurens never forgot

the scene in his house connected with the narrow escape of his daughter from being buried alive. In prescribing cremation for his body, and in directing disinheritance for disobedience of this order, he declared that he could conceive of nothing more terrible than resuscitation in a closed grave. His body was burned in accordance with the injunctions of his will.

“The Christian religion brought to light a truth which finally rendered cremation odious. As it has been expressed, it ‘glossed the deformity of death by careful consideration of the body.’ Recognizing the body as the lodging of Christ and temple of the Holy Ghost, Christians were considerate of it, as well as of the immortal soul, and attended its burial with long services and full solemnities; and so Christianity ‘gave final extinction to the sepulchral bonfires,’ and the practice of cremation died out by the beginning of the fourth century.

“One of the arguments which have been presented in favor of cremation is that what remains of the body after the analysis of fire is unchangeable. As Sir Thomas Browne expresses it, ‘He that hath the ashes of his friend hath an everlasting treasure. Where fire taketh leave corruption slowly enters. In bones well burnt fire makes a wall against itself.’ But cremation is urged upon much more practical grounds. It is urged as a measure necessary to the health of the living in communities where great numbers of bodies are undergoing decomposition, preventing, as it does, the process of putrefaction and all its attendant evils. It is less expensive than burial, as now conducted, and renders costly cemeteries unnecessary.

“Sir Henry Thompson, one of the most brilliant surgeons of modern times, and withal a conspicuously liberal and enlightened philanthropist, thus sums up the advantages of cremation: ‘For the purposes of cremation nothing is required but an apparatus of a suitable kind, the construction of which is well understood and easy to accomplish. With such apparatus the process is rapid and inoffensive, and the result is perfect. The space necessary for the purpose is small, and but little skilled labor is wanted. Not only is its employment compatible with religious rites, but it enables them to be conducted with greater ease and with far greater safety to the attendants than at a cemetery. For example, burial takes place in the open air, and necessitates exposure to all weathers; while cremation is necessarily conducted within a building, which



may be constructed to meet the requirements of mourners and attendants in relation to comfort and taste. Cremation destroys instantly all infectious quality in the body submitted to the process, and effectually prevents the possibility of other injury to the living from the remains at any future time.

"In reading the history of cremation as practiced in various nations, one can not fail to be struck with the tenderness exhibited by the survivors to the relics of the departed. The bones were carefully washed with wine and milk, and mothers wrapped them in linen and dried them in their bosoms, where they had been first fostered and nourished." Artemisia, the wife of Mausolus, even went so far as to drink of the ashes of her husband, erecting over the remainder a tomb of such magnificence that it ranked long as the seventh wonder of the world.

"But there is another fact with which we are impressed as we read this history, and that is the proof afforded every where of the early and universal respect to another life and a future state of existence. 'Before Plato could speak,' it has been beautifully said, 'the soul had wings in Homer.' All men craved immortality, and believed that their friends were alive in another world. Ulysses, that 'unconquerable man,' was unconcerned as to how he should live here, provided he could have a noble tomb after death. Socrates said to his friends, 'You may bury my body if in that you think not you are burying Socrates.' The philosopher, regarding only his better part, was indifferent whether his body should be burnt or buried. When proceeding to the last sad office they that kindled the funeral-pile turned their faces away, as expressing an unwilling ministrations; and before applying the torch they raised their eyes toward heaven as the place of their hopes. Lucian, though in a jesting way, expressed the prevailing belief of his times when he said of Hercules, 'That part which proceeded from Alcmena perished, while that from Jupiter remained immortal.' Such was the belief of these ancient pagans; and, though they saw the body perishing in the flames, they were assured that the soul endured forever.

"But I must hasten to a close. Only a few words remain to be spoken. The bond which has so pleasantly united us as officers and students of the University of Louisville is now severed, and we take you, pupils no longer, by the hand as professional brothers. Be assured that you will bear away with you our best wishes. Go forth



into the world and triumph; such is the prayer of your teachers. We hope the day is far distant when the obsequies of which I have been speaking to-night will be solemnized in the case of any of you. We expect you to prove worthy of the profession in which your new title declares you to be both skilled and learned, discharging faithfully its gentle and tender offices, and fulfilling unselfishly all its lofty obligations; and then it will indeed be but a small matter with you whether your ashes shall be gathered in costly urns, or your bodies lie beneath the rock-ribbed hills or are hidden in the caverns of the sea. Doing well your duty, you need give no thought to the rest. Gentlemen, farewell!"

THE AMERICAN MEDICAL ASSOCIATION.—The twenty-sixth annual session of this association will be held in Public Library Hall, in this city, on Tuesday, May 4, 1875, at eleven A. M. The following may be of interest to physicians who propose attending:

"The delegates shall receive their appointment from permanently-organized state medical societies, and such county and district medical societies as are recognized by representation in their respective state societies, and from the Medical Department of the Army and Navy of the United States."

"Each state, county, and district medical society entitled to representation shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; provided, however, that the number of delegates for any particular state, territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the association."

"The chairmen of the several sections shall prepare and read in the general sessions of the association papers on the advances and discoveries of the past year in the branches of science included in their respective sections." . . . —*By-laws*, art. ii, sec. 4.

#### SECTIONS.

1. *Practice of Medicine, Materia Medica, and Physiology*—Dr. Austin Flint, Sr., New York, N. Y., chairman; Dr. J. K. Bartlett, Milwaukee, Wis., secretary.

Special committees appointed to report to this section:

*On Meteorological Observations*—Dr. J. M. Toner, D. C., chairman; Dr. J. J. Woodward, U. S. A.; Dr. E. Lloyd Howard, Md.

*On Clinical Observations*—Dr. N. S. Davis, Ill., chairman; Dr. H. A. Johnson, Ill.; Dr. J. B. Johnson, Mo.

2. *Obstetrics and Diseases of Women and Children*—Dr. W. H. Byford, Chicago, Ill., chairman; Dr. S. C. Busey, Washington, D. C., secretary.

Special committees to prepare business for this section:

Dr. M. A. Pallen, N. Y., chairman; Dr. L. F. Warner, Mass.; Dr. J. K. Bartlett, Wis.

Committees appointed by the above:

*On Unusual Fetal Presentation*—Dr. J. A. Ochterloney, Ky.

*On Retroversion of the Uterus in the first five months of Pregnancy*—Dr. Heaton, Mich.

*On the Connection of the Hepatic Circulation with Uterine Hyperæmias, Fluxions, Congestions, and Inflammations*—Dr. L. F. Warner, Mass.

*On the Relation of Menstruation during Lactation*—Dr. S. C. Busey, D. C.

3. *Surgery and Anatomy*—Dr. E. M. Moore, Rochester, N. Y., chairman; Dr. T. S. Latimer, Baltimore, Md., secretary.

Committee to report to this section:

*On the Treatment of Fractures*—Dr. Lewis Sayre, New York, chairman.

4. *Medical Jurisprudence, Chemistry, and Psychology*—Dr. Jerome Cochran, Mobile, Ala., chairman; Dr. G. A. Moses, St. Louis, Mo., secretary.

5. *State Medicine and Public Hygiene*—Dr. H. I. Bowditch, Boston, chairman; Dr. H. B. Baker, Lansing, Mich., secretary.

Committees to report to this section:

*On the Ventilation of Dwellings, School-houses, and other Public Buildings*—Dr. R. C. Kedzie, Mich., chairman; Dr. A. B. Stuart, Minn.; Dr. R. J. O'Sullivan, N. Y.

*On Form of Bill to establish a National Department of Public Health at Washington*—Dr. H. B. Baker, Mich., chairman; Dr. H. A. Johnson, Ill.; Dr. J. M. Toner, D. C.

*On what Legislative Action, if any, can be taken to Enforce by Law an Examination of all Persons who enter upon the Practice of Medicine and Surgery by a State Board of Medical Examiners*—Dr. Foster Pratt, Mich., chairman; Dr. S. G. Armor, N. Y.; Dr. D. W. Vandell, Ky.

“Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the secretary to whom such papers are sent to examine them with care, and, with the advice of the chairman of his section, to determine the time and order of their presentation, and give due notice of the same.” . . . —*By-laws*, art. ii, sec. 5.

The attention of persons intending to present papers to any of the several sections is especially called to the above by-law.

The following committees are expected to report:

*On the Cultivation of the Cinchona-tree*—Dr. L. J. Deal, Pa., chairman.

*On some Diseases peculiar to Colorado*—Dr. John Elsner, Col., chairman.

*On American as compared with Foreign Winter-cures*—Dr. H. R. Storer, Mass., chairman.

*On Railroad Injuries*—Dr. W. F. Peck, Iowa, chairman.

*On Proper Legislation to Prevent the Spread of Syphilis*—Dr. S. D. Gross, Pa., chairman.

*On the Use of Pessaries*—Dr. John Morris, Md., chairman.

*On Cystic Degeneration of the Kidneys*—Dr. Jno. A. Ochterloney, Ky., chairman.

*On the Diseases of Minnesota and the Northwest*—Dr. D. W. Hand, Minn., chairman.

*On Prize Essays*—Dr. John D. Jackson, Ky., chairman. Dr. J. being absent, essays will be forwarded to Dr. Lunsford P. Vandell, Louisville Ky.

*On Necrology*—Dr. S. C. Chew, Md., chairman.

*On Rank of Medical Department of the Army*—Dr. J. M. Toner, D. C., chairman.

*On International Medical Association*—Dr. J. M. Toner, D. C., chairman.

*On Memorial on Dr. Henry Miller, deceased*—Dr. S. D. Gross, Pa., chairman.

*On Memorial on Dr. George Mendenhall, deceased*—Dr. J. A. Murphy, Ohio, chairman.

The following amendments to the plan of organization are to be acted upon :

By Dr. H. B. Baker, Michigan: "The officers of the several sections shall be nominated by the section in and for which said officers are to serve."

By Dr. Adams Jewett, Ohio: "The permanent members shall consist of all those who have served in the capacity of delegates, and of such other members as shall have received the appointment by unanimous vote, and of all others who, being members in good standing of any state or local medical society entitled to representation in this body, shall, after being vouched for by at least three members, be elected to membership by a vote of three fourths of the delegates in attendance, and shall continue such so long as they remain in good standing in the body of which they were members when elected to membership in this association, and comply with the requirements of its by-laws."

Secretaries of all state medical societies that have adopted the Code of Ethics are respectfully requested to forward to Wm. B. Atkinson, M. D., permanent secretary, Philadelphia, a complete list of the officers, with their post-office addresses, of those county and district medical societies entitled to representation in their respective bodies. This is the only guide for the Committee of Arrangements in determining as to the reception of delegates. It will also enable the permanent secretary to present a correct report of the medical organizations in fellowship with the association.

DEATH OF DR. BUSH.—Dr. James M. Bush died at his beautiful home in Lexington, Ky., on the morning of the 8th of February, 1875. His last hours were soothed by the ministrations of the surviving members of his family, and saddened, as many of the last months of his life had been,

by the absence of his son Dudley, into whose hands he had fondly cherished the hope of confiding the heritage of his own rare virtues and great name.

Dr. Bush was born in Frankfort, Ky., in May, 1808. His grandparents, Philip and Mary Bush, were Germans, and emigrated from Mannheim to Winchester, Va., in 1750. His parents, Philip and Eliza Bush, came to Frankfort at an early day. His brother, Jos. H. Bush, was distinguished for many years in the South and West as a portrait painter, and a lover of the fine arts generally. Dr. Bush had a genius largely of the same order, to which he was doubtless indebted for the achievement of much of his success in the more mechanical portion of the profession. He received his academic education at Danville, Ky. This must have been careful and thorough, for he was scholarly as a lecturer and as a writer. His general knowledge was extensive, and in the æsthetic departments he was a man of rare culture. About the year 1830 he entered upon the study of medicine and surgery in the city of Louisville, in the office of Dr. Alban Goldsmith. It was at this period that the writer of this notice made the acquaintance of Dr. Bush, which soon ripened into a friendship that ceased only with his death. His association with Dr. Goldsmith was fortunate in many regards, more particularly in giving a modern bias to his medical education. Dr. Goldsmith had just returned from Europe, and was filled with surgical ardor, and teeming with the latest developments of the science and art of surgery in the French capital. In this city of revolutions, as in other portions of Europe and in the United States, radical changes were going on in our art.

In 1830 Dr. Bush entered the Medical Department of Transylvania University, and soon attracted by his peculiar qualities of mind the attention of his illustrious friend and preceptor, Dr. Dudley. He received the degree of Doctor in Medicine in 1833, and was immediately appointed to the responsible position of demonstrator of anatomy. Professor

Dudley then held the two chairs of anatomy and surgery. In 1837 Dr. Dudley assigned to Dr. Bush the teaching of anatomy, and in 1839, on the retirement of Prof. Dudley, he was regularly appointed to the chair of surgery and anatomy. The history of medicine and surgery affords but few instances of such rapid and deserved promotion to the highest places in the profession.

In the spring of 1835 Dr. Bush married Miss Charlotte James, a daughter of Thomas James, a distinguished citizen of Chillicothe, Ohio. Miss James, though born in Ohio, was reared and educated near Louisville, Ky., at the elegant and hospitable residence of Mrs. Helen Massie. It was here that Dr. Bush first had the good fortune to meet her. Soon after marriage Dr. Bush returned to his home in Lexington, where he steadily advanced in fame and fortune, in the personal love and professional confidence of the enlightened people of that city, to the hour of his death.

In 1850 Dr. Bush, Dr. Peter, and other associate professors in Transylvania were invited to chairs in the Kentucky School of Medicine, of Louisville. This school already containing several very able men, the addition of these gentlemen made a corps of medical teachers of great strength. Dr. Bush continued his connection with Transylvania during the summer term of teaching. He lectured in Louisville for three winters, and won here the high regard which was felt for him in Lexington.

I have now given a very general and superficial history of the life of our friend Dr. Bush. Many of the details, in their chronological order, have been obtained from the secular papers of Lexington, which were filled for a time with eulogies of him. What was the basis of a character so noble, of a career so useful and distinguished, of an affection felt for him by all classes of people, of a confidence so great that when his extreme illness was announced "a feeling was almost universal that some indefinable danger was imminent,

and that the accustomed safeguard would be wanting if the great physician were taken away?"

Dr. Bush possessed a singularly well-balanced mind. His purely intellectual powers were of a high order; his perceptive faculties were keen, clear, quick, enabling him to make accurate observations upon disease and other subjects to which they were directed, separating the true from the false, the real from the hypothetical. Then he had genius of a varied kind; "that inborn, indefinable essence, including talent, and yet distinct from it." These more purely mental powers were so co-ordinated and impelled by the physical forces of the nervous system as to render him competent to achieve great results in any department of intellectual work. They were discerned at an early day by his sagacious preceptor, Prof. Dudley. He saw that Dr. Bush possessed just the combination of mental powers to make him successful as a demonstrator of anatomy, as a teacher and practitioner of medicine and surgery; hence he did not hesitate to lay wide open to him his own extensive field of business. Once there, his success was assured.

He enjoyed the confidence of his professional brethren, because they knew that his ample knowledge of medicine in all its practical departments, his diagnostic acumen, and his rational judgment in therapeutics were to be depended upon in cases of difficulty and danger. He won their admiration and love by his absolute fairness in all his professional relations. He walked along the broad, open pathway of medical science, illuminated by justice and truth. He scorned with a bitter scorn all those men who try to win success by detraction of other members of the profession. He despised charlatanry, whether practiced openly or by men who claim to be gentlemen and regular members of the profession. He certainly never did an unfair or mean thing, and I doubt whether an ignoble thought ever found lodgment in his mind. His constant association with young men kept him in sym-



pathy with them, and he stood by them in their hours of trouble as long as his fealty to honor would permit him. Graduates of medicine pointed with pride to his name on their diplomas.

The public estimate of him as a man and physician was unusually high. Few physicians have ever enjoyed so large a share of personal and professional confidence. Though never holding any official municipal position, on the occasion of his death the city council passed resolutions expressive of their high appreciation of his character, and regret that such a citizen should be removed from among them. The council attended his funeral in its official capacity, and instructed the mayor to issue a proclamation requesting the suspension of business along the streets through which the funeral-cortege moved. This is a rare honor to a physician. L. R.

CINCHO-QUININE.—Our clinical experience in the use of the cincho-quinine having led us to think favorably of it as an antiperiodic, we confess to having experienced no little surprise when Mr. Ebert, of Chicago, stated before the American Pharmaceutical Association at its meeting in this city in August last that the compound contained neither quinine, quinidine, nor cinchonidine, and was therefore worthless. We were unwilling to allow that we had been deceived in the estimate we had formed of the powers of the drug, nor could we believe that either Mr. Nichols or Messrs. Billings & Clapp would originate a fraud. It now appears that Mr. Ebert fell in some way into an error, as a printed circular recently received contains the certificates of a number of leading chemists in different cities of the Union, in all of which it is positively affirmed that the cincho-quinine contains the several alkaloids as stated by its manufacturers. We are glad to have our good opinion of the drug sustained by such competent authority.

# THE AMERICAN PRACTITIONER.

MAY, 1875.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### ANALYSIS OF ONE THOUSAND CASES OF SKIN-DISEASE, WITH CASES AND REMARKS ON TREATMENT.\*

BY L. D. BULKLEY, A. M., M. D.

It is my purpose in the present paper to give some of the results of American experience in the observation and treatment of diseases of the skin, a branch which by no means merits the practical neglect with which it has been treated, but which repays to the fullest degree the most careful and serious consideration. I shall first make a short statistical inquiry as to the relative frequency of the different forms of cutaneous affections, and the influence of age, sex, etc., in their production, as based on an analysis of the cases treated at the Outdoor Department of Bellevue Hospital during the year 1874 by Dr. Maxwell and myself, Dr. Beverhout Thompson also attending a short time, and shall afterward invite attention to some practical methods of treat-

\* Read before the New York Medical Library and Journal Association February 12, 1875.

ment of these maladies which experience has shown to be of value. In my remarks I wish to be distinctly understood as expressing my own opinions as to theory and methods of practice, and do not thereby implicate in any manner either Dr. Maxwell or Dr. Thompson. I saw about one half of the cases.

The total number of new patients recorded in the class of skin-diseases during the entire year was one thousand and eighty-four, but of this number fifty were either wrongly entered in this department or there was no diagnosis given; and I have further struck off the first thirty-four patients of the year to make the number exactly one thousand, for convenience of comparison with other cutaneous statistics. The cases of diseases of the skin I have arranged in two tables: the first giving an alphabetical list of the diseases, and the number of instances of each, and the sex of the patients; and the second arranged in the order of frequency, with the percentage of the same.

TABLE I.

DISEASE.	Male .....	Female .....	Unknown .....	Total .....	DISEASE.	Male .....	Female .....	Unknown .....	Total .....
Acne.....	42	69	...	111	Onychia .....	1	2	...	3
Alopecia .....	3	1	...	4	Pemphigus .....	...	2	...	2
Bromide of Potass. Eruption...	1	...	...	1	Phthiriasis .....	22	7	...	57
Chloasma .....	...	3	...	3	Pityriasis.....	4	35	...	11
Clavus .....	...	2	...	2	Prurigo .....	6	3	...	9
Dermatitis.....	5	9	...	14	Pruritus.....	9	23	...	32
Ecthyma .....	4	3	...	7	Psoriasis.....	23	27	...	50
Eczema.....	137	164	1	302	Purpura.....	3	4	...	7
Elephantiasis Arabum .....	...	1	...	1	Roseola .....	...	2	...	2
Erectile Tumor (pedunculated)...	1	...	...	1	Rötheln .....	...	1	...	1
Frysipelas.....	8	5	...	13	Scabies ...	21	15	...	36
Erythema .....	7	18	...	25	Scleroderma .....	...	1	...	1
Excoriationes .....	2	1	...	3	Scrofuloderma verrucosum .....	1	1	...	2
Furuncul .....	10	9	...	19	Sycosis .....	8	...	...	8
Herpes .....	9	12	1	22	Syphilodermata .....	28	70	...	98
Hyperæsthesia cutis. ....	2	...	...	2	Tinea .....	28	20	...	48
Hyperidrosis (pedum).....	1	1	...	2	Ulcera .....	5	15	...	20
Ichthyosis .....	1	2	...	3	Urticaria .....	13	29	...	42
Lichen .....	6	6	...	12	Varioloid .....	1	...	...	1
Lupus .....	3	9	...	12	Verruca .....	5	...	...	5
Miliaria.....	1	...	...	1					
Neuroma (painfu.).....	1	...	...	1					
						424	574	2	1000

TABLE II.

DISEASE.		Number..	Per cent..	DISEASE.		Number..	Per cent..		
Eczema.....	{ Impetiginous.....	5	30.2	Erysipelas...	{ Faciei.....	8	13		
	{ Lichenous.....	8			{ Capitis.....	1			
Acne.....	{.....	289	11.1	Lichen.....	{.....	4	1.2		
	{ Sebacea.....	12			{ Scrofulosorum.....	1			
	{ Punctata.....	8			{ Simplex.....	5			
	{ Molluscum.....	1			{ Agrius.....	2			
	{ Simplex.....	40			{ Lividus.....	1			
	{ Indurata.....	22			{ Erythematosus.....	2			
Syphilodermata.....	{ Rosacea.....	28	9.8	Lupus.....	{ Vulgaris.....	10	1.2		
	{.....	98			{.....	11			
Phthiriasis ..	{ Capitis.....	24	5.7	Pityriasis.....	{.....	9	0.9		
	{ Corporis.....	20			{.....	8			
{	{ Pubis.....	1	4.8	Purpura.....	{ Rheumatica.....	1	7		
	{ Phthiriophobia.....	11			{ Hemorrhagica.....	1			
Tinea {	{.....	21	4.8	Ecthyma.....	{ Simplex.....	5	7		
	{ Circinata.....	21			Verruca.....	{.....		5	
	{ Sycosis.....	2				{ Areata.....		1	
	{ Tonsurans.....	10				{ Partialis.....		1	
{	{.....	9	4.2	Alopecia.....		{.....	2	4	
	{ Versicolor.....	9			{.....	2			
Urticaria.....	{ Favosa.....	5	3.6	Epithelioma.....	{ Nasi.....	3	4		
	{ Onychia Parasitica.....	1			{ Labialis.....	1			
Scabies.....	{.....	42	3.2	Chloasma.....	{.....	3	3		
	{ Senilis.....	8			{.....	3			
Pruritus.....	{ Vulva.....	3	2.5	Excoriationes.....	{.....	3	0.3		
	{ Pregnans.....	1			{.....	3			
Erythema {	{.....	20	2.2	Ichthyosis.....	{.....	3	0.3		
	{ Faciei.....	11			Onychia.....	{.....		3	
	{ Multiforme.....	2				Clavus.....		{.....	2
	{ Papulatum.....	2						Hyperæsthesia cutis.....	{.....
{ Papulatum et nodosum.....	1	Hyperidrosis (pedum).....	{.....	2					
{.....	9		Pemphigus.....	{.....	2				
{ Zoster.....	12			Roseola.....	{.....	2			
{ Faciei.....	2				Scrofuloderma verrucosum.....	{.....	2		
{ Labialis.....	7	Elephantiasis Arabum.....				{.....	1		
{ Lingua.....	1		Erectile Tumor (pedunculated).....			{.....	1		
Ulcera.....	{.....			20		Miliaria.....	{.....	1	
	{.....			19	Neuroma.....		{.....	1	
Furunculi {	{.....	1.9		Eruption from Bromide of Potassium.....			{.....	1	
	{ Venenata.....	3	Rötheln.....				{.....	1	
Dermatitis {	{ Calorica.....	1				Scleroderma.....	{.....	1	
	{ Traumatica.....	2			Variceloid.....		{.....	1	
{.....	8	1.4		1.4			1.4	1.4	

1000

1000

It will be seen on glancing at the tables that all the diseases which have been noted are arranged under forty-three heads, and that several of these again include a number of different forms usually recognized as separate diseases; thus acne has six varieties; eczema includes much that might be called by some impetigo and lichen; tinea includes the tinea circinata and tonsurans, or ring-worm of the body and head; also favus, parasitic sycosis, and so on.

Considerably more than one half of all the patients were females—five hundred and seventy-four to four hundred and

twenty-four males, an excess of one hundred and fifty or fifteen per cent of females—and in two cases the sex was not stated. But little can be learned, however, from this, as the females are more at leisure to come during the dispensary hours, and many of the diseases are more annoying to this sex than to men. But a comparatively small proportion were children, except in the case of eczema, where about one sixth of the entire number were five years of age or under. The number of cases is too small to draw any conclusions as to the season of the year in which various diseases are wont to appear, nor can any deductions be made as to the effect of occupation in producing disease, except in certain instances. It is, however, certain to my mind that a very large share of cases are the direct result of filth, neglect of hygienic rules, and of poor and improper food. As an instance of the effect of filth I would cite the one hundred and forty-one cases due to animal and vegetable parasites, one seventh of the whole number analyzed; of the neglect of hygienic considerations, the ninety-eight cases of syphilitic eruptions, or one tenth of the whole; and of dietary errors, the one hundred and seventy-seven cases of acne, erythema, and urticaria, or one sixth of the whole; together with the direct effect of dietary errors in causing outbreaks of eczema, furuncles, pruritus, lichen, etc.

In further commenting upon these cases I shall speak of the diseases in the order of their frequency, taking occasion at times to compare these statistics with those which have been published in other cities.

1. *Eczema*.—First in the list of diseases of the skin, from its frequency as well as its very great importance, stands eczema; and in all the statistics published it has always outnumbered any other form of cutaneous disease many-fold (with the single exception, I believe, of McCall Anderson's hospital statistics,\* where scabies equals eczema in frequency),

\* Diseases of the Skin—Analysis of Eleven Thousand Cases. London, 1872.

the proportion being always about the same; namely, one third of all cases. Under eczema I have included its lichenous and impetiginous forms, although it will be seen that the term lichen is also retained to represent a separate disease, as will be noticed later. Eczema occurred three hundred and two times in the one thousand cases; one hundred and sixty-four females, one hundred and thirty-seven males; in one case the sex was not noted. This relation of the sexes is quite at variance with what has been stated by Wilson\* with reference to its occurrence in the middle and higher walks of life. Thus in his first thousand the majority of males over females was forty-four, in the second thousand thirty-one, the majority of the whole two thousand being seventy-five; whereas with us the proportion was reversed, the excess being twenty-seven in the thousand in favor of females.

It is impossible from dispensary statistics to give the ages at which the disease appears, as in very many of the cases it was of long duration or a second or later attack; nor can we adduce any thing definite as to the length of time under treatment, although notes were made of many cases, as the attendance of the poor is often fitful, and dependent very frequently upon their ability to find employment or not, and they seldom are seen as long as the physician would wish. Again, ignorance and forgetfulness on the part of patients do much to prevent or retard a cure, assisted to a large degree by the erroneous diet and habits of life, which it is often impossible to alter.

It may be interesting, however, to consider for a moment the age of those applying for relief, as in the following table:

1 year and under.....	18	20 to 30 years.....	39
1 to 2 years.....	16	30 to 40 years.....	33
2 to 3 years.....	9	40 to 50 years.....	38
3 to 4 years.....	5	50 to 60 years.....	40
4 to 5 years.....	8	60 to 70 years.....	28
5 to 10 years.....	20	70 years and over.....	3
10 to 20 years.....	39	Uncertain age.....	1

\* Journal of Cutaneous Medicine, etc., vol. i, 1868, p. 258.

Here it will be seen that the greatest predisposition to eczema is during the first year of life, when eighteen cases were observed; and during the first five years fifty-six cases, or more than one sixth of the whole, occurred; the next five years, five to ten, giving but twenty, or a total of seventy-six for the first decade. Wilson's statistics give but twenty-nine for the first thousand and forty-one for the second during this first decade, showing that the lower station in life has much to do in rendering the very earlier years subject to eczema. Again, the thirty years from the ages of thirty to sixty gave with Wilson one hundred and sixty-two patients with eczema in each thousand against one hundred and sixteen in our statistics. Now this period between thirty and sixty we know to be that most liable to gouty trouble, and it is quite probable that the indolent and sedative life with over-indulgence of the rich has much to do in making eczema more common during middle life in the higher walks of English society than among the lower classes in America.

As to the treatment of these cases, having entered quite fully into "The Management of Eczema," in a paper read before this association within the current year,\* I will not at this time dwell much on the subject. Quite a proportion of these cases were in the young, as before stated; eighteen of the patients occurring in the first year of life, fifty-six in all being five years or under. Eczema at this period requires very careful and judicious treatment. Each case almost will require a different course; and it is well to remember that it is the *patient* which is to be treated, and not the disease. I do not order poultices to remove the crusts of infantile eczema, as many do, preferring much to cause their separation by means of fatty matter. Among the poor, and sometimes among the rich, I have the head soaked in cod-liver oil (sweet-almond oil answers), or I have an ointment applied at

\*Transactions of American Medical Association, vol. xxv, 1874, page 121.  
Reprint, G. P. Putnam's Sons, New York.



once in a tolerably soft form; directing that the head shall not be washed at all, but as fast as the crusts fall, perhaps with slight assistance from the finger-nail, the ointment is to be re-applied; the idea being to thoroughly protect the irritated mucous layer of the skin, and to shield it from air and water. Occasionally the crusts will accumulate and adhere, and it becomes necessary to use a poultice or wash the head well with warm water and borax; but this, in my experience, is very rare.

During the past year I have employed very largely tannin in ointment (one drachm to one ounce) in eczema, and like it very well. A very common treatment is to bathe first with the *liquor picis alkalinus*, diluted ten or twelve times, twice a day, and apply the tannin ointment immediately afterward. I have also used with very satisfactory results the subnitrate of bismuth in ointment (half a drachm to one ounce), and prefer it in very many instances to that of zinc, as commonly employed. I would again mention the value of the rose-ointment as an excipient, and its efficiency when the simple ointment has failed. Several cases of eczema rubrum covering quite a large part of the body of children one or two years old were seen. These cases are often most obstinate. Our best results were attained by starch and alkaline baths, and powdering the surface with subnitrate of bismuth and starch.

Internal treatment is always required, and I believe that the largest percentage of good results was obtained by means of cod-liver oil in appropriate doses. Syrup of the iodide of iron is also invaluable in treating eczema in children.

In adults most of the cases of eczema were of the chronic form, very many of them being in the legs, and dependent upon varicose veins. The treatment of these is very frequently unsatisfactory, because of the continued existence of the cause, especially among the poor, who can not give the necessary time to rest. Elastic stockings should be insisted on in eczema of the legs when the disease has recurred often

or lasted long; for, although the veins may not appear to be varicose, there is often a want of tone of the capillaries, which is supplied by the stockings. We have had good results from the use of tarry preparations, and have known a moist eczema to be completely healed after a very few applications of the *liquor picis alkalinus* in full strength. A common treatment in chronic eczema is equal parts of tar and oxide-of-zinc ointments, with the addition of a little mercurial ointment, as the citrine, when the surface ceases to be moist.

In place of the *sapo viridis*, or green potash soap of the Germans, I have been employing the ordinary American soft-soap made with potash, and with almost, if not quite, as good results, although it contains relatively less potassa. In one case of eczema of the hands, in a mason aged thirty-three years, which had existed for ten or more years, it was used with excellent effect. He had been treated by me with other measures for six months with varying success, and when this method was commenced the skin on the backs of both hands was very greatly thickened, even to three or four times the normal; the surface was hard and scaly in some places, moist and cracking in others. He was first given a strong potash solution (one drachm to one ounce), with which the surface was well rubbed once or twice, and covered with the diachylon ointment of the Germans. This caused great swelling, which subsided, leaving the parts somewhat less thickened. He was then directed to rub in the common soft-soap well, night and morning, and cover the hands as before; and after a short time the friction with which it was applied was increased, until he came to using an ordinary scrubbing-brush, such as is used for the floor. Dipping it in soft-soap, the back of each hand was scrubbed—the palm resting on a table—till the opposite arm and shoulder were tired. The result was that at each visit a marked diminution in the thickness was noticed, and in three weeks the skin was reduced to

almost the normal thickness, and his hands better than they had been for ten years. This is an exaggerated case, but is of value, showing how far the stimulating treatment may be pushed with advantage; whereas, on the contrary, ninety out of one hundred of the ordinary run of eczema cases would be greatly aggravated by such means.

In one case of eczema of the scrotum I obtained very excellent results from the repeated application, by means of a camel's-hair brush, of the compound tincture of benzoin. The man ceased attending before the thickening had entirely disappeared, and the ultimate result can not be stated with certainty; but it is probable that the disease was cured, as the remedy was the first one tried by me, and the relief and satisfaction expressed by the patient was very great.

Quite a large share of the cases of ordinary eczema of various parts was treated by the oxide-of-zinc ointment, very generally in conjunction with some internal medication, depending upon the state of the patient. Many of this class are the constant subjects of dyspepsia, and the rhubarb-and-soda mixture was very commonly used. I frequently add Fowler's solution to it, giving of the latter three or four drops with a tea-spoonful of the former. Many of these patients require tonics, and the ammonio-citrate of iron and compound tincture of cinchona were generally used. Acute lichenous eczema I frequently treated with Startin's mixture of sulphate of magnesia, sulphate of iron, aromatic sulphuric acid, and gentian. Acetate of potassa, alone or combined, was used somewhat, and in my hands has done much for eczema.

2. *Acne*.—Acne appears second on our list in point of frequency, and we are quite willing to accord it that place so far as the annoyance to the patient (and oftentimes the physician) is concerned. Although acne belongs rather to those of luxurious habit, it is not an uncommon affection among the poor of this city, and especially those who lead indoor lives; hence it is that by far the larger number affected

are females (although it is true that, it being more a matter of vanity and not a disease affecting the welfare of the patient, males pay less attention to it).

There appear in our statistics one hundred and eleven cases of acne, of which sixty-nine were females and forty-two males. This is the largest proportion of any report of poor-practice with which we are acquainted, except in the Boston Dispensary for Diseases of the Skin, for 1874, where the ratio is a trifle larger. Among the poor of Glasgow \* the proportion is only about one twenty-fifth of the whole; that is, but about one half the frequency which we have recorded; a fact due, as we suppose, to the more outdoor life of the Scotch, their plainer habits of living, and perhaps their national fondness for oat-meal. Certain it is also that the almost universal habit of frying much of the food, together with the great use of potatoes and the over-indulgence in tea, are prolific sources of acne with us.

Under acne I include not only the well-known papular and pustular eruption on the face, but also the erythematous form; the acne rosacea, which Wilson has attempted to isolate with the name gutta rosea; also the functional disturbances known as comedo, or acne punctata, and seborrhœa, or acne sebacea. The one hundred and eleven cases presented the following varieties: acne sebacea, 12; acne punctata, 8; acne molluscum, 1; acne simplex, 40; acne indurata, 22; acne rosacea, 28.

The acne simplex is decidedly a disease of adolescence. The youngest persons in whom it was observed were in two girls aged fourteen; two boys aged fifteen were recorded also with this form. During the five years, from fifteen to twenty, thirty-five cases of acne applied for treatment, and twenty-nine from twenty to twenty-five years of age; thus making the total number before twenty-five years of age sixty-six, and after this period but forty-five.

\* McCall Anderson—Treatment of Diseases of the Skin, 1872, p. 7.

It is not easy to make out the causes of disease among this class of patients, as the time given for treating them is very limited, and the notes made are often hurried. A large share of the cases, however, depended more or less directly upon the occupation, habits, and diet of the patient. Very many were directly associated with constipation and dyspepsia, as I have elsewhere shown,\* and a few doubtless with uterine derangement, as many of the symptoms were often complained of; but no uterine examination is possible in this run of practice. To my mind it is useless to call this acne by the name *juvenilis*, and attribute it to sexual development; for, although it most certainly occurs very frequently during this period, on the other hand multitudes pass puberty without its appearance, or if it does occur it is of mild form and short duration; the changes in the skin occurring at puberty undoubtedly predisposing to it, but the disease does not appear in its rebellious form without some other exciting cause.

The oldest patient with acne rosacea was a man aged fifty-four. There were quite a number of cases of acne sebacea in old persons, the oldest person being a man aged sixty-six. The nose is the most common seat of the dry, almost horny, secretion, forming crusts reaching down into the sebaceous glands. These latter cases are very difficult to cure. The best treatment is the repeated application of an alkaline wash (as of caustic potash, five to ten grains to the ounce), and the after-use of some slightly stimulating ointment, applied in very small quantity.

Very many of the acne patients were benefited by the internal administration of acetate of potassa (fifteen grains three times daily, well diluted) on an empty stomach; but the effect of this must be followed up by tonics. Arsenic, in my experience, is of but very little use in acne. I have during the past two or three years employed quite largely

\* American Practitioner, December, 1872.

the plan of treatment suggested by Gubler, of Paris—namely, the internal use of glycerine in doses of from one to three or four tea-spoonfuls three times a day, after eating—and with good results. At first I colored and flavored it, but latterly I have given the citrate of iron and quinine in it, which effects both, and assists its tonic action. This plan is especially suited to those whose skins are greasy or muddy-looking, with many comedones. I have had it fail repeatedly in the rosaceous form.

Locally most of my patients used hot water with good results, and I have prescribed more largely than any other a lotion containing one drachm of washed sulphur, four drachms of sulphuric ether, and three and a half ounces of alcohol, and with very generally good effect. I have rarely employed the bichloride of mercury in washes, but sometimes the well-known wash of sulphur, camphor, and water.

3. *Syphilodermata*.—It is a sad fact that third on our list as to frequency of occurrence come the cutaneous lesions produced by syphilis; and sadder yet, that of the ninety-eight cases of this which were recorded seventy occurred in females to twenty-eight males. Syphilis thus gave rise to nearly ten per cent of all the cases of skin-disease. This does not include the primary sores, they seldom, if ever, appearing in this class. This percentage is much greater than that given in most other statistics; thus in McCall Anderson's ten thousand dispensary patients but a trifle over five per cent of the diseases were of specific origin; at the London Hospital for Diseases of the Skin only about five per cent; at St. John's Hospital for Diseases of the Skin only about three per cent; at the Boston Dispensary for Diseases of the Skin the proportion was about seven per cent, and at the Philadelphia Dispensary about eleven per cent.

The majority of the cases were those of the later manifestations of syphilis, the earlier or macular eruption appearing more seldom. Thirty-one were recorded as having tubercular



syphilis, many others noted as having merely tertiary symptoms. There were no new cases of infantile syphilis recorded during the year, but there were a number under treatment, entered on the books toward the close of the preceding year. Although but little can be learned from the ages of these patients, inasmuch as many of the cases suffered from the initial lesion many years previously, it may not be uninteresting to note that the youngest applying was aged thirteen, a girl; also other girls aged sixteen and seventeen; the youngest male being seventeen; the oldest person was aged sixty-one; sixty-six of the ninety-eight were between twenty and forty years of age.

There were five cases of the squamous syphiloderm of the palm of the hand, often wrongly called palmar psoriasis. Some of these were of long duration, and had been treated locally elsewhere with no effect, but yielded promptly and perfectly to the internal administration of specific treatment.

One very remarkable case of dactylitis syphilitica occurred, which was shown at the New York Dermatological Society, and recorded in the Archives of Dermatology for October, 1874. The boy was aged sixteen, and the disease, which had lasted almost from infancy, had produced great deformity of both hands and feet, some of the phalanges seeming lengthened and others shortened, and the skin was marked by many cicatrices, and in some places there were ulcerating portions covered with scales and crusts. The disease had been considered scrofulous formerly, and the boy had taken cod-liver oil most of his life, with but little benefit. Very prompt improvement in the parts still undergoing active change was obtained by the mixed treatment. The disease was probably congenital.

Another remarkable case of probably hereditary syphilis was also under treatment, in a fine-looking married woman, aged twenty-four, who had been affected with a tubercular cutaneous lesion since about seven years of age. On the



forehead were two well-marked depressions left after nodes, and on the forehead, lip, cheek, and back there are still remains of the eruption. She has improved more under the treatment of mercury and iodide of potassium than under any she has previously had, and the large tubercular syphilide covering the whole of back of the shoulders, which was ulcerated and crusted when first seen, has healed.

Certain cases have proved most rebellious to treatment. In one woman of forty-three years a gummy tumor of the right elbow has resisted every measure, has ulcerated into the joint, the bone has necrosed, and the arm has been useless for many months. The patient is irregular in attendance, is very poor, and all the elements of the case are unfavorable. In one case of tubercular eruption about the right cheek and nose but little change was effected by internal treatment until the local application of the oleate of mercury (ten per cent), when rapid improvement took place for a while, but the masses are again stationary. One patient, a woman aged fifty-three, with dactylitis of the right large toe, retained her disease for many months. Ulceration occurred from friction, the joint appeared to be opened (but was not probed), but the ulceration healed again, leaving the joint still much enlarged when last seen.

In another woman, aged forty years, eczema was a very troublesome complication of syphilis. She had an ulcerating tubercular syphilide of the sole of right foot, and shortly after the administration of the mixed treatment on several occasions the leg and other portions became so severely affected with eczema that treatment had to be suspended, as the trouble increased as long as it was persisted in. So it was necessary to alternate the treatment as one or the other disease gained the ascendancy, until finally the syphilide was healed and only a little scaly eczema left. On one occasion the whole body was affected, red, hot, and rough, and afterward desquamated abundantly, leaving in some places moist eczema. I suppose

it was owing to a peculiar susceptibility to iodide of potassium, which I have known to induce eczema in other cases.

In another case, of a man about thirty-five years of age, a thickened patch of chronic eczema improved very rapidly and satisfactorily under a specific treatment given for a papular syphilide, but did not disappear entirely until a local application was made. Such cases are sometimes called syphilitic eczema, wrongly I think, for I have yet to learn that a true eczema can be produced solely by syphilis.

One patient, aged fifty-one, presented the peculiar and somewhat rare disease described by Van Buren and Keyes as chronic circumscribed inflammation of the erectile tissue of the corpora cavernosa. He came first for the treatment of a slightly ulcerating tubercular syphilide on the right buttock, and great general prostration. He had no other symptoms, and gave no other syphilitic history or of any primary sore certainly within the previous ten years; but shortly after being first seen he had diffuse syphilitic orchitis, which disappeared with the cutaneous lesion after a few weeks' longer treatment. Shortly after the occurrence of the testicular trouble I noticed the hard patch deep in the texture of the penis, on its upper surface, causing deviation on erection. The case was shown and examined at the New York Dermatological Society, and the disease recognized completely. There was a hard plate, of cartilaginous feel, about half an inch square, occupying about the middle of the dorsum of the penis, situated evidently in the corpora cavernosa; the skin was freely movable over it. The disease has lasted to the present time, six or seven months, and has rather increased than diminished. He has taken syphilitic treatment all the time, and kept the oleate of mercury (ten per cent) applied.

The treatment in most of my cases has been the bichloride of mercury (one thirty-second of a grain) with from seven to fifteen grains of iodide of potassium in mixture, with tonics,

thrice daily. I have combined the carbonate of ammonia with the potassium in many cases, with rather better results than from the iodide alone. Inunction was but seldom used.

4. *Phthiriasis and Scabies*.—Animal parasitic diseases also formed nearly one tenth of the whole number of our cases. Of the ninety-three present fifty-seven were due to the varieties of pediculus, or louse, and have the name *phthiriasis*; and thirty-six to the *acarus scabei*, forming *scabies*, or itch. These diseases, preventable by cleanliness, are, I am glad to say, very much less frequent here than in Scotland; for McCall Anderson states that scabies forms fully twenty-five per cent or one fourth of the whole number of skin-patients among the poor in Glasgow, and Milton over eighteen per cent at the St. John's Hospital for Diseases of the Skin in London. It is to be hoped the proportion here will be even more lessened as intelligence and sanitary knowledge pervades the community.

The varieties of phthiriasis were as follows: phthiriasis capitis, 24; corporis, 20; not stated, 11; pubis, 1; phthirio-phobia, 1. Of the fifty-seven cases thirty-five were females and twenty-two males. The statistics as to the first variety, affecting the head, are interesting as to probable causation. Twenty-three of the twenty-four occurred in persons under twenty years of age; and of these twenty-three nineteen were in females, owing probably to the longer hair, the number and kind of articles used for adornment, and the greater difficulty in combing it when once infected. The *plica polonica*, the nature of which was so long a mystery, is nothing more or less than hair matted together by uncleanness, and allowed to become the home of both animal and vegetable parasites. Happily this condition is very rarely seen in this country; none of these cases even approached to it. Body-lice are a very frequent accompaniment of poverty, and the cases here recorded (twenty) give no idea of the frequency of the condition, as but few of those suffering from them apply for relief,

knowing its uselessness under the existing circumstances. Occasionally over-scrupulous persons become infested with the *idea* that they are suffering from body- or head-lice, when really perfectly free from them, to such a degree as to cause themselves much mental distress and the physician much annoyance. One such case was recorded under the name *phthiriophobia*.

Our common method of treatment of the head-lice among the poor is to soak the head well for twenty-four hours in kerosene-oil, which destroys all the bugs and their nits; then wash the head well with soap and warm water, comb it out, and saturate it with cod-liver oil till all the sore places are healed. This treatment is very rapid and very sure, three or four days or a week at most serving to heal all excoriations. Or white precipitate or citrine ointment, diluted two or three times, applied from the first, will answer in many cases, and is perhaps the best in private practice. Its value is increased by having it highly scented with rosemary or some other volatile oil. For lice of the body we generally use a combination of one drachm of caustic potash and two drachms of carbolic acid in four ounces of water, using it diluted once or twice at first, directing also the clothing to be sprinkled with it. To make the cure of any of these forms permanent the clothing must be either boiled or baked for a long time, also the bed-linen, and often the bedding itself requires attention.

Of the thirty-six cases of *scabies*, twenty-one occurred in males and fifteen in females, and twenty-six of the entire number in persons under twenty years of age. In several persons older than twenty years it could be directly traced to contagion in the family or to the occupation. Thus, one old man of sixty with scabies was a shoemaker, and contracted the disease in all probability from children's shoes which he was mending; for we know that the feet are very commonly affected in this disease in children. Another man,

aged twenty-seven, was a rag-carpet maker, an occupation fraught with danger from many infectious diseases. In one family five were affected, aged respectively ten months, four, six, eleven, and thirteen years; in another family four members had the eruption.

In older persons the disease was treated with sulphur ointment, with the addition of a little carbonate of potash. In younger patients, with more tender skins, the liquid storax or balsam of Peru, in ointment, was used, with equally good if not better results.

5. *Psoriasis*.—The cases of psoriasis, fifty in number, were pretty evenly divided between the sexes, twenty-seven females to twenty-three males. The youngest patient was nine years of age, a boy; the oldest seventy, also a male, and another case of a man aged sixty. Many of the cases were of great duration; one case is noted as having lasted twenty-four years in a woman aged thirty-nine, another eighteen years in a woman of thirty-seven; of course, with exacerbations and remissions; the case of the man aged seventy was recorded as psoriasis inveterata, but no duration is stated.

Most of these patients were treated largely by local measures alone, because of the well-known obstinacy of the disease and the frequent neglect of treatment, whereby much that had been done would often be wasted. The preparations of tar, *liquor picis alkalinus*, or Hebra's compound tincture of green soap and oil of cade, were principally used, with diluted mercurial ointments. In many of the more recent cases arsenic and alkalies were given, but no conclusions as to results can be drawn. I have obtained, however, very marked effects from the internal administration of tar and potash as combined in the *liquor picis alkalinus*, which we have so often presented to the profession\* (*picis liquidæ*, ʒij; *potassæ causticæ*, ʒj; *aquæ*, ʒv), giving from fifteen to thirty drops, largely diluted, on an empty stomach. It has the direct

\*Archives of Scientific and Practical Medicine, Feb., 1873 (Brown-Sequard's).

effect of diminishing the cutaneous congestion and lessening the scales. When long-continued it may disagree with the stomach, but it is a remedy of value when others fail. Three of the patients with psoriasis—two males, each aged forty, and one female, aged forty-four—had acne rosacea. No necessary connection between the two diseases is known. In none of the cases of psoriasis which came under my observation were the tongue or lips affected; all were examined, I believe. I mention this as some have intimated a connection between the lesion known as *psoriasis linguae* and this disease.

6. *Tinea*.—Forty-eight patients—twenty females, twenty-eight males—affected with diseases caused by vegetable parasites were recorded, and are thus divided: *First*, those due to the parasite *trichophyton*—(a) *tinea tonsurans* (ring-worm of the head) 10, (b) *tinea circinata* (ring-worm of the body) 21, (c) *tinea sycosis* 2, total 33; *second*, that caused by the *microsporon furfur*—the *tinea versicolor*, 9; *third*, that due to the *achorion Schönleini*—*tinea favosa*, or favus, 5; *fourth*, of uncertain origin, *onychias parasitica*, 1. *Tinea tonsurans* is emphatically a disease of childhood, all of the ten cases occurring in patients fourteen years of age or under—three girls, seven boys—while an equal number of ring-worms of the body were seen during the same period of life—six girls and four boys—the oldest being thirteen years. The oldest person with this form of disease was a woman aged forty-five.

*Tinea versicolor* is stated by McCall Anderson to occur as frequently in males as females. Of our nine cases seven were the latter and but two males; but this number by no means indicates its frequency, as it is of such slight importance that patients do not often apply for its removal. I well remember its frequency among miscellaneous patients when hospital *interne*, and when serving in other dispensary classes. It seldom attacks children or those past middle life.

Five cases of favus were recorded during the year. The disease is rare in this country as compared with Europe.



McCall Anderson gives over fifteen and a half per thousand, or more than three times the proportion here observed.

It will be noticed that I have not included among the vegetable parasitic diseases the *alopecia areata*, which has been thus classed by some with the name *tinea decalvans*, and ascribed to a parasite *microsporon audouini*. One case of this occurred; but as I have repeatedly and always searched in vain for the supposed parasite, and believe the weight of evidence to make it a neurosis, I place it with the other forms of alopecia.

As to the treatment of the vegetable parasitic diseases, I trust very much to sulphurous acid; but since this is difficult to get and keep strong in dispensary practice, many of the cases were treated with mercurial ointments, properly diluted. I have also used with success the oleate of mercury (ten per cent), likewise the *liquor picis alkalinus* in ointment (one drachm to one ounce). I object very much to the use of the bichloride-of-mercury wash after the fatal case from its use in England a year or so since. Any preparation must be very thoroughly applied in order to be effectual, and I generally recommend frequent and thorough washings with soap first in all this class of affections. In the *tinea versicolor* the carbolic-acid-and-potash wash mentioned under phthiriasis is very effectual. I have recently learned of success in ring-worm from the local use of castor-oil, a very few applications sufficing for a cure. I have not tried it, but shall do so, for every new remedy of value added to our list is a great acquisition.

7. *Urticaria*.—Of this disease there were recorded forty-two cases, twenty-nine females to thirteen males. I feel that little can be added from these cases, as they are mostly acute attacks, and the patients were generally seen but once or twice. One case of periodical urticaria, occurring at seven o'clock every evening, was arrested by quinine, about ten grains, given an hour or two before the expected attack.



8. *Scabies*.—This, the next most frequent disease, has been already noticed with phthiriasis, section 4.

9. *Pruritus*.—Pruritus, among the poor especially, is such an uncertain disease, due to so many causes, that the teachings from those recorded at Bellevue are rather unsatisfactory. Thirty-two cases were noted, twenty-three females and nine males, of which eight were put down as pruritus senilis, three of the vulva, one due to pregnancy, and in twenty nothing is stated save the diagnosis pruritus. It is probable that very many were due to lice, although none were found, or their traces, in the examination given.

10. *Erythema*.—Besides the erythematous stages of eczema at its beginning and ending, there were twenty-five cases—eighteen females and seven males—recorded as distinct erythema, classified as follows: erythema of the face and nose, 11; erythema multiforme, 2; erythema papulatum, 2; erythema papulatum et nodosum, 1; and in nine cases simply erythema. Erythema of the face and nose, unconnected with any other disease, is not very uncommon, though among the poor comparatively few apply for its relief. In McCall Anderson's statistics of private practice the different varieties of erythema together formed one tenth of the whole thousand, though it was far from being as frequent with Mr. Wilson.

Several cases of multiform erythema were seen in young Irish girls just after landing, a disease which I have repeatedly met with under similar circumstances in other dispensaries. They are undoubtedly the result of the disturbed condition of the digestive functions, assisted by neglect of cleanliness, so common under these circumstances. These cases usually yield very promptly to a mercurial purge and the mixture of sulphate of magnesia, iron, acid, and gentian before alluded to. Two cases of erythema papulatum were observed, and one in which this form was associated with the erythema nodosum. In this latter case some rheumatic symptoms were also present.

11. *Herpes*.—Twenty-two cases were recorded as herpes—twelve females, nine males, one sex not stated—of which twelve were cases of herpes zoster or zona, seven were on the lip, two the face, and one the tongue. Of the cases of zoster, two affected the leg and one was brachio-thoracic; the youngest patient was a boy two and a half years old, the oldest a woman of fifty; two others, boys, aged seven and thirteen respectively, were attacked; five of the twelve were females, seven males.

12. *Ulcers*.—Most of the cases of ulcers were of the lower extremity, and the result of varicose veins. The cases were in the main intractable, owing to the weak condition of the patients, the necessity of their standing on the feet most of the day, and their neglect of treatment. None of the radical methods of treatment were employed—such as incisions in and around them, tying the varices, etc.—because the cases did not seem to warrant it. The number of ulcers noted, those from syphilis not being included, was twenty, occurring in fifteen females and five males. The youngest was a youth of nineteen, with varicose ulcers; the oldest a man of sixty-five, with the same trouble. Twelve cases of the twenty were included between the ages of thirty and forty.

13. *Furuncles*.—Nineteen patients—nine females and ten males—were entered on the book with furuncles (one of them was carbuncular). The ages ranged from three to sixty years. I have relied a good deal on the hyposulphite of soda, half a drachm thrice daily, in cinnamon-water, largely diluted, on an empty stomach, as recommended by McCall Anderson, and have had repeated evidence of its very great value in checking the suppurative action. The rhubarb-and-soda mixture answers also very well, and was given to many patients. Sometimes cod-liver oil acted better than any other remedy.

14. *Dermatitis*.—The cases which can properly be classed as dermatitis were few in number—fourteen—nine of which occurred in female and five in male patients. Two were due

to the irritation of the rhus toxicodendron, one to fire, one to a cantharidal blister, two to traumatism, and in eight the cause or variety is not stated or is not significant.

15. *Erysipelas*.—Erysipelas presented itself in thirteen patients, five females and eight males. Eight times it affected the face, once the head, once the leg, once the foot, and in two the location was not stated. The treatment varied with the case, and did not present any thing of special interest.

16. *Lichen*.—I can not agree with the German school in making but two kinds of lichen, the lichen scrofulosorum and lichen ruber. Clinically there appear a variety of cases of papular eruption, which never tend to become eczematous, but whose papules—red, acuminate, and firm to the feel—stand more or less isolated, itch excessively, and often resist treatment most unsatisfactorily. This eruption may be either acute or chronic, attacks chiefly the extensor surfaces, often the neck and shoulders; the acute form giving rise to burning pain and imparting a sensation of heat to the hand, the chronic variety only itching and feeling rough. We recognize therefore clinically three varieties of lichen: (1) lichen simplex, acute or chronic; (2) lichen ruber planus; and (3) lichen scrofulosorum. There were twelve cases—six females, six males—of lichen in the thousand, of which five were the acute simplex form, two the chronic simplex or agrius, one the lichen scrofulosorum, one associated with purpura, and in three the variety was not stated. The ages varied from eight to sixty-eight years, the majority of all the patients being between twenty-two and forty-five years of age. The treatment of the acute forms was soothing, of the chronic stimulating, with tar and mercurial ointments, as the citrine. The lichen scrofulosorum requires cod-liver oil.

17. *Lupus*.—But twelve cases of lupus were recorded, of which nine occurred in females and three in males. This accords with the experience of others, which makes lupus to be much more frequent in women than in men. But the

disease is not nearly so common here as in other countries, our proportion of lupus to other diseases of the skin being only a little over one per cent; in Glasgow it is almost two per cent in dispensary and two and a half in private practice; Hebra's statistics give 1.66 per cent for lupus vulgaris alone; Wilson's private practice 1.55 per cent for both forms. Of the twelve cases two were of the erythematous variety, eight of the vulgaris (one of these being of the exedens form), and in two only the term lupus was recorded. The youngest patient was the boy, aged sixteen, referred to below; the oldest sixty-five years of age. One case of the ulcerating variety, on the end of the nose of a boy aged sixteen, was treated by Hebra's method with the points of nitrate of silver, and cured completely in three sittings. The disease has not returned now after an interval of seven months. Most of the cases were treated less actively, with varying success; many are soon lost sight of.

18. *Pityriasis*.—Of the eleven cases of pityriasis recorded seven were in females and four in males; the youngest five months, the oldest fifty years of age. Inasmuch as the cases were none of them seen by myself, I will reserve comments.

19. *Prurigo*.—It is very important that correct ideas should prevail as to the use of the terms pruritus and prurigo; the former a symptom in a large share of cases or a neurosis in others, and the latter, as has been well-defined by Hebra, a true cutaneous disease. This latter affection—consisting of fibrinous papules deep in the cutis, the skin being generally of normal color over them except when scratched, the eruption developed principally on the extensor surfaces, more commonly on the thighs and legs first, with enlargement of the nearest lymphatic glands—this true prurigo of Hebra is seldom seen in this country. I have observed it but a few times, and not at all among the patients whose diseases are here analyzed. I have made these remarks because I believe the cases here recorded as prurigo were hastily so inscribed,

and were in many instances due to the presence of pediculi or other cause, and that a share of them at least were only *pruritus*. There were nine cases—three females, six males—ranging from twenty-five to seventy years of age.

20. *Sycosis*.—Sycosis is another term requiring more careful definition. As is well known, it is a pustular disease of the bearded face, attended with the development of nodules, and is an inflammation of the hair-follicles, which in this situation are unusually large and deep, and provided with larger and more abundant sebaceous glands than many other parts. It is classed by Hebra and Neumann with acne. It is often the result of a neglected eczema barbæ, and is also often but a development of acne tubercles in these parts. The parasitic and non-parasitic sycosis should be carefully differentiated. The former—due to the presence of the trichophyton, and being but a modified tinea circinata—has been already considered. There were eight cases recorded as sycosis alone, the youngest patient being twenty and the oldest forty years of age. They were all supposed to be non-parasitic; but, microscopic examination being absent, that can not be determined with certainty.

21. *Purpura*.—Purpura occurred in seven patients—four females, three males—at ages ranging from thirteen to fifty-eight years. One was a case of purpura hemorrhagica and one of the rheumatic variety, known to some as *peliosis rheumatica*, but more properly, I think, *purpura rheumatica*. No connection could be established in the cases which I saw, either with dietary errors or sanitary violations.

I will not enumerate separately each of the remaining varieties of cutaneous disease which presented themselves, as the number of each was very small, and such a course would weary without instructing. I will only mention a few of the more interesting or unusual facts.

Four cases of *epithelioma*—two males, two females—were observed; one of the lip, one of the nose, one of the inner

angle of the orbit and the nose, and one at the junction of the ala of the nose with the cheek on the right side. This latter case, in a woman aged forty, was completely cured by one application of Marsden's mucilage, made of equal parts of arsenious acid and powdered gum acacia, moistened with water into a thick paste. This was spread on a piece of lint and pressed closely on the ulcer (Marsden spreads it on the sore itself), and after about twenty-four hours a poultice was applied till the slough separated and the remaining ulcer healed. The disease has not yet returned after the expiration of six months.

Three cases of *ichthyosis*, one of them of the sebaceous variety, were noted. Of the two of *ichthyosis* proper, one was in a female infant of seven months, the other in a man of thirty-three years.

*Hyperidrosis* was treated in two cases, both affecting the feet; one a male aged sixty, the other a girl of sixteen. The latter was quite promptly checked by the diachylon ointment of the Germans, spread on linen and worn day and night, changing it twice daily. Two weeks served to remove all the tenderness and arrest the excessive secretion. The case occurred recently, and permanent results can not be recorded, but the treatment has been well reported of by others.

Two cases of *pemphigus* occurred in female children, aged three and four years respectively. They were seen but once or twice. The disease was not syphilitic.

The only case of a *nævoid* character was an erectile tumor of the forehead, which was pedunculated, and was removed by a ligature.

One instance of *eruption from bromide of potassium*, administered for epilepsy, was seen in a young man aged seventeen years.

A single case of *rötheln* was recorded in May of last year in a girl aged nine years, just as the epidemic was drawing to a close.

An unusual instance of *scleroderma*, affecting both feet and the back of the right hand of a woman aged forty-five, was watched some time with considerable interest. The disease had been slowly increasing for about a year, from a slight stiffness, until walking became impeded, and going up and down stairs quite a painful exercise, owing to the thickening and hardening of the skin around the ankles. The case improved very considerably under the use of the constant galvanic current, locally and generally, but was lost sight of, and the result not known.

We have thus endeavored to contribute to the statistical inquiry in regard to skin-diseases, and to compare some of the more common affections as they appear among our lower classes with the same in other countries. We shall hope soon to present the same with reference to these affections in the higher walks of life. In our remarks on treatment we have desired simply to call attention to some of the principal measures which have been found serviceable in treating this class of patients. It is to be greatly regretted, while the poor are especially liable to skin-diseases, there is no proper hospital where they may be accommodated and treated by baths and other methods which experience has proved of service, and where the diet and sanitary surroundings would be such as would contribute to their cure.

NEW YORK.



## THREE CASES OF TRACHEOTOMY FOR FOREIGN BODIES.\*

BY DAVID W. YANDELL, M. D.

CASE I.—In January, 1873, Willy, aged nine years, a son of Dr. Rodman, of Seymour, Ind., fell while running through a field, and on rising sucked a cockle-burr into his windpipe. He suffered all the symptoms incident to such an accident, and had the usual course of emetics, etc. At the end of three weeks he was brought to me. His breathing was habitually somewhat difficult, and on exertion became labored. He had a vexatious cough, which, at times paroxysmal, was occasionally most distressing. Auscultation and percussion by my colleague, Prof. Bell, and by Dr. Garvin led them to believe that the foreign body lay in the right bronchus, and on occasion rose and fell again. I opened the trachea at my clinic at the University, but the burr was not expelled. I searched for it with forceps; I stood the patient on his head, and made repeated succussion of the trunk, and thumped him on the back, but all to no purpose. The tracheal opening, however, was a free one, and the breathing became easy. I inserted two silver hooks held together by a screw, as being better than those in ordinary use, removed Willy to his room, where the temperature was kept at 75° and the air made moist by the vapor of water.

The only annoyance the patient experienced for several days arose from the occasional clogging of the opening by an excessively tenacious mucus, which until removed brought back the old dyspnœa. About the fifth day the wound was so inclined to cicatrize that it became difficult to retain the hooks. On the seventh day, as my friend, Prof. Cowling, and

\* An abstract of a paper read before the Kentucky State Medical Society, at Henderson, April 6, 1875.

I were entering the house where my patient was staying, we met him at the door rushing out of it, his face white with fright, his eyes almost starting from their sockets. I can never forget his expression. The hooks had slipped out, and the boy was struggling for air. It was but the work of a moment to catch and place him on a table, enlarge the opening to its original size with a probe, and re-introduce the hooks. The burr was expelled two days after by the mouth during a fit of coughing. The edges of the wound were approximated by plaster, and Willy soon went home to make a speedy recovery.

CASE II.—A few days after I operated on young Rodman a five-year-old girl living in Grayson County, Ky., was carrying a newly-made horseshoe-nail in her mouth, when it slipped into her windpipe. This was on the 15th day of February, 1873. Three weeks after she was sent to me by my friend, Dr. Heston. Auscultation and percussion gave evidence of the presence of the nail in the right bronchus. I cut into the trachea at my clinic the next day. The foreign body was not extruded. Neither inversion of the body, succussion, nor prolonged efforts to seize and remove it by forceps were of any avail. I inserted the hooks as in Case I, and after a short time the patient returned home. A letter recently received from a former pupil, Dr. Z. Carnes, of Hardin Springs, contains the subsequent history of the case.

The hooks were allowed to remain for nearly a month. On being removed the wound quickly healed. The patient now coughed much and spit up great quantities of pus. She could not lie down, but passed her time in a half-sitting posture. She rapidly emaciated, and looked the picture of wretchedness. For three months her death was looked for daily. She then seemed to improve somewhat, the cough and expectoration grew less, and for the next three months the intervals between copious expectoration and cough and of comparative ease were about fourteen days. At these times

severe paroxysms of cough followed by much expectoration would occur, continue for a day or so, grow less, and then measurably cease. It seemed as though an abscess would occupy a couple of weeks in filling, and then discharge itself. The time between these attacks has been gradually lengthening. For twelve months the sputa were mixed with a dark-colored matter resembling anvil-dust, and the child said had the taste of iron. For a year past the sputa have lost this tinge, and are white and thin, resembling buttermilk, and excessively offensive. The breath is also fetid. It has now been six months since the expectoration became suddenly abundant. During the most of 1873 the expectoration was often mixed with blood, and once in that time there was a distinct though small hemoptysis. For eighteen months she had hectic and night-sweats. She now occasionally has slight hectic. Pain was never a prominent symptom in her case, and for months past there has been none. She can now lie in any position, but coughs most when on her back. She eats well, has regained her flesh, and is cheerful.

On inspection, both elevation and expansion of the right side of the chest are much diminished, and the entire side is shrunken. Percussion gives diminished resonance in supra-clavicular space, and this grows more marked as you descend, until in the mammary region there is positive flatness. Auscultation reveals puerile breathing in the extreme summit of the lung, both in front and behind. Where the flatness on percussion begins there are all the signs of a considerable cavity. No air appears to enter the lung below this point. Respiratory sounds in the healthy lung are exaggerated.

CASE III.—A lad, aged fourteen, living near Louisville, in attempting to remove by his lips a cockle-burr which had fastened on his glove, had the misfortune to have it pass into his windpipe. He had the usual distressing symptoms. Three days after he was sent to me by my friend, Dr. Shaller. Auscultation seemed to establish that the burr occupied the

right bronchus, and the patient stated that he had felt it move up and down. I performed tracheotomy, making the opening a little over the usual size, in presence of the class at the University of Louisville, with the effect of relieving the breathing, but without securing the expulsion of the burr. Forceps were freely used, the patient's head put on the floor and his feet held in the air, succussion of the trunk, thumping the back, but all without avail; the burr remained. The hooks were inserted into the wound, and the lad was removed to the house of a relative in the city. For three days he had no unpleasant symptoms. The instrument now began to clog with a viscid mucus, and on more than one occasion the boy jerked it out, bringing on in every instance a suffocative fit, which came near ending fatally before the hooks could be replaced. To guard against a repetition of this danger my friend, Dr. Roberts, remained with the patient the fifth night after the operation; and, taking care to keep the opening free from mucus, the patient had a comfortable rest without obstruction to his breathing. The next morning he awoke cheerful, wrote on a slate about matters of business, etc., and agreed that he would not again attempt to remove the instrument. Dr. Roberts left him. In less than an hour word came that the boy was dead. It seems that almost immediately after Dr. R. quit the house a violent fit of coughing came on, during which the patient forgot his good resolutions, and in spite of his nurses pulled the instrument out of his trachea, and before it could be re-introduced the poor fellow perished from suffocation. After death the burr was found lying immediately above the upper margin of the original incision, where it had doubtless been driven during the last paroxysm of coughing.

LOUISVILLE.

## Reviews.

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### Vagino-cervioplasty in lieu of Amputation of the Cervix Uteri in certain forms of Intra-vaginal Elongation.

By MONTROSE A. PALLER, A. M., M. D., Lecturer on the Surgical Diseases of Women in the Medical Department of the University of New York. Read by invitation of the New York Obstetrical Society. Reprinted from Journal of Obstetrics.

A paper coming thus doubly indorsed, even if it did not bear the name of its eminent author, is entitled to thorough consideration. It is probably one of the ablest of Dr. Pallen's contributions to professional literature, and in some respects fairly presents his peculiar talents, though it does not do him justice as to his literary culture and ability to write plain and simple English. The operation he describes is doubtless original, is certainly quite ingenious in its conception, and its successful performance indicates no mean skill.

The term *vagino-cervioplasty* is an unfortunate one, a verbal hybrid of Latin and Greek, having little to recommend it for professional adoption. In reading the paper we find that the certain forms of intra-vaginal elongation on the title-page really become a single form in the description and in the record of cases.

We have previously alluded to the literary character of this production, and before entering upon its scientific teaching one or two remarks will be made upon this. The more obvious faults are the coining of words and the occasional erroneous use of well-known words. "A shover of the queer" is the expression used among counterfeiters for those who put

in circulation counterfeit money; and when a writer gives us new words, until we get familiar with them by their use, he seems to us a shover of the queer in language. Pubertic, post-pubertic, ballooning, and sustentative are among Dr. Pallen's contributions to the English language. He speaks of certain so-called malformations of the sexual organs as "heterodox formations." Surely it would puzzle the most skillful theologian to ascertain any relation, for example, between a normal uterus and orthodoxy, or a double vagina and heterodoxy. One might as well speak of an orthodox ox or a heterodox horse.

Generally a plain truth can be expressed in plain words; but what is meant by the assertion that "excessive developmental impulse . . . determines an increase of one or more of the factors of copulation, generation, or parturition"? Why not plainly say vagina, ovaries, or uterus, instead of factors of functions? Again: "The interconnections of the vagina, bladder, rectum, uterus, oviducts, and ovaries indicate certain relations that are not to be transgressed without inducing portentous troubles, as represented by dyspareunia, dysmenorrhœa, dystocia, or sterility." The transgression of relations is at least doubtful, and the troubles mentioned are big enough without being made portentous.

We are told of "pathogenetic causes," when diseases would express the truth as well; of "congenital or teratological abnormalities," which is simply heaping Ossa on Pelion.

Dr. Pallen presents clearly and succinctly the embryonic development of the vagina, and the normal relations between that organ and the uterus; and calls attention to the fact that in some instances the attachment of the former to the latter takes place higher up, in others lower down, than should be. So far he repeats that which other observers have fully noticed; Dr. Sims in his *Uterine Surgery*, for example, and Courty in his work on diseases of females. The latter—pages 89 and 90, last edition—devotes some space to the

anomalies of dimensions of the vagina; and gives an engraving of a case, which is quoted by Dr. Pallen, where the posterior vaginal wall was attached to the body of the uterus.

Dr. Pallen, in referring to the dangers of amputation with the *écraseur* in cases of hypertrophic elongation of the cervix, asserts that in all cases of such elongation the peritoneum is dragged down with the cervix. This is true so far as cases of Huguier's supra-vaginal hypertrophy is concerned, but not necessarily so of intra-vaginal hypertrophy; indeed one of the diagnostic marks of the latter condition, as pointed out by Huguier himself, distinguishing it from uterine prolapse, is that the vagina preserves its normal height. So too the conoid amputation of the cervix was devised by him for the former hypertrophy, and has no pertinence where introduced by Dr. Pallen in reference to intra-vaginal elongation of the cervix.

Vagino-cervioplasty, in the words of Dr. Pallen, is applicable to those cases where the longitudinal diameter of the utero-cervical cavity does not exceed three inches, but where the intra-vaginal portion of the cervix is so long as to interfere with either locomotion, sitting, coition, menstruation, or conception. The object of the operation is to lessen the part of the neck in the vagina, and in it the first step is to denude nearly the whole of the vaginal portion of its mucous covering. In the rules given for this denudation there is an apparent contradiction on contiguous pages. Thus on page 5 we are told that the dissection should not be so high posteriorly as anteriorly; and in a few sentences further on we are taught that the dissection commences three lines from the end of the cervix anteriorly, posteriorly a little less than two lines; and in front this dissection is carried up about an inch, behind more than an inch. Now it is evident that if these latter rules are followed, the first is violated. The next step is making "separating incisions three to eight lines in depth" in the submucous tissue, and thus flaps are formed; then



these flaps are united by silver sutures, four behind and three in front, and the operation is completed.

We have no hesitation in repeating that the operation is ingenious, and that the results Dr. Pallen has obtained are remarkable. We do not understand that any portion of the vagina is divided, save its mucous membrane and some of its submucous tissue just at the attachment of this organ to the uterus, but the uterus slides up, is pushed, gets up some way, and stays up; a sort of transplantation of the vagina effected, and a normal implantation given it in lieu of that abnormal attachment, which was congenital. In one of Dr. Pallen's cases the os, which protruded at the vulva, is by this brilliant operation made to recede two inches therefrom, and remain. In another, where the os protruded half an inch from the vulva, and in certain positions\* irritated the clitoris, and by this "mechanical attrition" produced "the most deplorable consequences," the result of the operation was equally satisfactory. That the muscular coat of the superior portion of the vagina, a part of this coat proceeding from the uterus itself, can instantly be stretched so as to permit this immediate upward sliding of the cervix for an inch, and then, speaking after the manner of the writer, there be sustentative power in the stitched mucous membrane to hold up a pubertic uterus one, two, or three inches above the place it has occupied for a score of years it may be, are certainly truths which are not of *a priori* discovery, but could only be established by actual experiment.

Whether others will be so convinced of the safety, certainty, and utility of the operation by Dr. Pallen's remarkable successes as to repeat it remains to be seen.

T. P.

\*The position of the body of the uterus when its errant cervix was indulging in paroxysmal mechanical attrition is not explained; but let any one attempt a diagram of this extraordinary condition, and, commencing his drawing with the cervix in contact with the clitoris, he will be almost as much at a loss to locate the rest of the organs as St. Paul was in one of his visions to decide his relations to his own body.

**Histology and Histo-chemistry of Man.** By HEINRICH FREY, Professor of Medicine in Zurich. New York: D. Appleton & Co. 1875.

This work is German in all its features, and could have been produced nowhere else but in Germany. It is minute, painstaking, laborious to the last degree. Any one curious about the elements of composition and structure of the human body will find in it a mine of knowledge, to which he may devote himself with unceasing interest. We hope there are in our country many students who will master its varied and curious details. The publishers have issued it in the best style of their art. It is elaborately illustrated.

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**On Functional Derangements of the Liver.** By CHARLES MURCHISON, M. D., LL. D., F. R. S., Fellow of the Royal College of Physicians, etc. New York: Wm. Wood & Co. 1875.

For many years no organ of the human body was so much studied in its relations to disease as the liver, but for a long time past it has been comparatively neglected. From having been looked to in nearly all chronic diseases as bearing an important part in the case, it came to be almost entirely ignored. We are glad that Dr. Murchison has recalled the attention of physicians to those functional disorders of which the liver was once believed to be so often the seat. This admirable volume, the work of a practitioner who has brought to the investigation of his subject all the light of modern physiological science, will exert a decided influence on the minds of medical men, and awaken renewed interest in the complaints of which it treats. It consists of the "Croonian Lectures," delivered, in 1874, at the Royal College of Physicians, and is introduced by a very satisfactory account of the functions of the liver in health.

The great size of the liver attracted the attention of the

earliest anatomists and physiologists, who naturally argued that an organ of such magnitude must be a controlling one in the animal economy. In fact the liver was regarded by the ancients as the central organ of vegetative life; Galen claiming for it the office of sanguification and the generation of animal heat, as well as that of forming bile; and this was the accepted theory for more than sixteen centuries. The great Harvey himself in the main upheld the views of Galen; but when it came to be known that the chyle was conveyed at once to the blood independently of the *vena portæ* the liver fell from its high estate. Bartholin wrote its epitaph in Latin, announcing that its sole function was the secretion of bile—"vixit, floret que pro bile separanda." In this, however, the modern was not so near the truth as the old physiologist, for the formation of bile seems to be the least important of all the offices of the liver. As Galen conjectured, it is intimately concerned in the process of sanguification. The blood is depurated by its action. The nitrogenous compounds which reach it in the circulation are reduced to more simple combinations, and in the form of urea or lithic acid are eliminated from the blood by the kidneys. Another of its functions is the formation of liver-sugar, otherwise styled glycogen, which it has the power of developing out of albuminous as well as amylaceous articles of food. Glycogen by oxidation becomes a main source of heat in the animal system; and also takes part in cell-growth and in muscular motion. The great activity of children seems to be connected with the oxidation of sugar, for which they are well known to have a peculiar craving. When the sugar taken in as food or generated by the liver fails to be duly oxidized it appears in the urine, as albuminous matters escape when not reduced to the state of uræa or lithic acid, and glycosuria or albuminuria results.

The oxidizing process of the liver, by which albuminous substances are disintegrated, is necessarily attended with the

evolution of heat, and consequently we find the temperature of the liver higher than that of other internal parts by from four to six degrees. And so Galen was right on this point, though what he expressed can only be regarded in the light of a conjecture.

The secretion of bile is the most obvious function of the liver, but it hardly reaches the dignity of the other two. Animals bear its suspension better than the failure of those metamorphoses by which the kidneys are protected; in other words, they live longer with bile than urea in the blood. A very small part of the bile secreted escapes as excrementitious. All but a few grains is absorbed and returns to the circulation. That which descends the alimentary tube acts as an antiseptic, retarding putrefactive changes and stimulating peristaltic action. Flatulence is one of the symptoms indicating its deficiency in the alimentary mass. Constipation is another well-known result.

After the sketch of the functions of the liver given by Dr. Murchison, of which we have here attempted the merest outline, his readers are prepared to recognize their derangements, among which he mentions obesity, emaciation, gout, lithæmia, and urinary and biliary calculi. How these disorders are brought about by derangement of the liver is easily seen by reference to its physiological action.

The most frequent of them is lithæmia, in which there is imperfect disintegration of the albuminous elements of food. Lithic acid is formed as a consequence instead of urea. The symptoms attending it are those usually styled bilious. Acidity, flatulence, heartburn, weight and fullness about the epigastrium, vertigo, headache, furred tongue, drowsiness after meals, palpitation of the heart, constipation, and irregularity of pulse are the most striking. Other and more serious disorders follow, as degeneration of the kidney, structural disease of the liver, and degeneration of the tissues throughout the body.

Among the primary causes of functional disorder of the liver our author mentions errors in diet, especially alcohol, and deficient supply of oxygen, the result of inaction. The remedy in these cases is preventive; diet and exercise are the main elements of treatment. In all former years cholagogues were deemed essential in these disorders, and calomel and blue-pill were in almost universal use. The practical physician gave a dose of one of them, and finding his patient improved by the bilious passages that followed concluded that his mercurial had stimulated the liver to increased activity, and that the improvement in his patient's condition was due to this cause. But the physiologist "ties the common bile-duct in one of the lower animals, produces a fistulous opening into the gall-bladder, and then finds that calomel has no effect on, if it do not diminish, the amount of bile that drains away through the fistula." Kolliker and Müller first and then Scott and Mosler found it so, and John Hughes Bennett and Röhrig confirmed the observation. Röhrig indeed remarked an increase of biliary secretion after "large doses of calomel," but it was less than followed a dose of croton-oil, jalap, colocynth, or sulphate of magnesia.

Admitting that the action of mercury is the same upon dogs and men in health, it does not follow that in disease there may not be some condition adverse to the secretion of bile which the medicine may have the power of removing; and besides, by sweeping on the bile from the duodenum calomel undoubtedly prevents its re-absorption, and thus by lessening the amount circulating in the portal blood "it is after all a true cholagogue, relieving a loaded liver far more effectually than if it acted merely by stimulating the liver to increased secretion." But to submit the question to the test of experience Dr. Murchison continues: "Patients of the greatest intelligence suffering from hepatic disorders constantly declare that they derive benefit from occasional or repeated doses of mercurials which no other medicine or

treatment confers; and the skepticism of the most doubting physician would, I believe, be removed should he unfortunately find it necessary to test the truth of their statements in his own person. It is not impossible that the good effects of mercury on the liver and in some forms of inflammation may be due to its property of promoting disintegration. The remarkable effect of mercury on constitutional syphilis probably admits of a similar explanation. But in whatever way it is to be explained, the clinical proofs of the efficacy of mercury in certain derangements of the liver are to my mind overwhelming. I say so the more advisedly, because I was taught to regard mercury as a remedy worse than useless not only in hepatic diseases, but in syphilis. It can not therefore be said that the convictions forced upon me by experience are the result of preconceived opinions."

The testimony of such a practitioner as Dr. Murchison to the value of mercury as a remedy comes in most opportunely at this time, when there are those high in the profession who would expunge it from the pharmacopœia. Altogether this little volume is one which we can heartily recommend to our readers as interesting and instructive in no ordinary degree. Every where it bears the impress of a master-mind thoroughly versed in medical science.

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**Lectures on Diseases of the Respiratory Organs, Heart, and Kidneys.** By ALFRED L. LOOMIS, M. D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York, Consulting Physician to the Charity Hospital, etc. New York: William Wood & Co. 1875.

These lectures, we learn by the preface, were delivered to the students in the University of the City of New York last year, and are published, with slight alterations, as delivered

by the author. To this circumstance is due a freshness and vividness in the matter and style of the lectures which the author would probably not have attained if he had gone about writing a systematic treatise on the subject. At the same time they are thorough in their treatment of every practical point, and afford a trustworthy guide to the practitioner in reference to this most important class of diseases. Occurring as these do every day in the practice of nearly every physician, it is very desirable to have frequent successions of works concerning them, bringing up our information to the latest period. In the one before us the reader may look confidently for the last words on the subject, and may rest assured that what the author has here committed to the press is the result of much learning, sound judgment, and thorough experience. The style is at the same time concise and spirited, and the practical instructions all that the student or practitioner could desire. A full index adds value to the work, which we feel confident will take rank with the very best on the subject in our language, having this advantage that it is the latest.

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**Cyclopedia of Practical Medicine.** Edited by Dr. H. VON ZIEMSEN, Professor of Clinical Medicine in Munich. Vol. II. New York: William Wood & Co. 1875.

This second volume of Ziemssen's Cyclopedia, like the first, is a work of most imposing appearance, carefully and elegantly translated into English, and issued under the auspices of Albert H. Buck, M. D., the American editor, in the best style of its enterprising publishers. It treats of acute infectious diseases, and each treatise indicates learning, industry, and great care on the part of its author. Our favorable impressions of the work previously expressed are fully sustained by the second volume; for while the articles vary



in merit, and most of them contain views as to practice from which we should dissent, we have no hesitation in saying that it promises to make a most valuable contribution to our medical literature. It will form in fact a medical library in itself, to which the inquirer may resort for information on any subject relating to practical medicine. The writers of this volume are Thomas, Curschmann, Zuelzer, Hertz, and Ziemssen. We are interested in the biographical sketches which are given of the authors, and have been surprised to find them so young. Thus of the contributors to this volume Thomas and Zuelzer are under forty, Curschmann is under thirty, and Hertz is only a little over forty years of age. Ziemssen, the intrepid editor, was born in 1829, and is therefore still a young man; but with their large clinical experience, derived from the great hospitals with which they are connected, they have ampler materials for writing about disease than most practitioners would accumulate in a long life-time. We shall look with interest for the appearance of each successive volume of this great work.

## Clinic of the Month.

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THORACENTESIS IN PNEUMO-THORAX.—The third lecture in the series of Clinical Lectures, edited by Dr. Seguin, is by Prof. Flint, and is entitled pneumo-thorax. As there can be no higher authority in all that relates to lung-trouble than the distinguished professor at Bellevue, we quote his remarks on thoracentesis: "If the pleural cavity become filled after pneumo-thorax has been known to exist, I would not resort to aspiration so long as the quantity of liquid was not large enough to occasion suffering from dyspnœa; that is, assuming that the liquid is not pus, and this is readily ascertained by exploring with the hypodermic syringe; but if there be sufficient dilatation of the chest to occasion dyspnœa, I would withdraw a certain quantity of the liquid, enough to relieve dyspnœa, leaving sufficient to secure the possible advantage of compression; and the withdrawal of liquid within this limit may be repeated *pro re natâ*."

Prof. Flint gives it as his opinion that the liquid should be withdrawn from the chest always by means of either a canula or catheter. "Puncturing the chest to give exit either to air or air and liquid whenever the suffering from dyspnœa, due to dilatation, is great, is undoubtedly judicious as a merely palliative measure. This I have done repeatedly. But the inquiry has arisen in my mind whether it may not be possible in some rare cases to accomplish something beyond a temporary relief by making a free opening into the chest, as in cases of pneumo-thorax incident to empyema. Let us suppose a case of pneumo-thorax from the bursting of a tuberculous cavity, the amount of phthisis small, the disease

non-progressive, and all the circumstances favorable for arrest and recovery, aside from the perforation of lung. There are such cases, albeit they are infrequent. May we not hope that by a free incision the cure of pneumo-thorax is possible in these cases? The answer to this question must be based on clinical facts which are yet to be acquired. Meanwhile I can see no objection to making trial of this measure. 'Pneumo-thorax occurring as a complication of phthisis is almost hopeless. In the majority of cases this complication destroys life within a short period. We may say that the prognosis involves only a question of tolerance. It is probable that a free opening into the chest will not shorten the duration of life, and it certainly affords great relief. It is therefore warrantable.'

THE PREVENTION AND EARLY TREATMENT OF PULMONARY PHTHISIS.—Dr. E. D. Hudson recently read a paper before the New York Academy of Medicine on this subject, which concludes as follows:

"1. Dyscrasia, or predisposition, is largely accumulative, and is the result of the predisposing influences mentioned, which sanitary regulations may to a great extent remove.

"2. Inflammatory attacks are the chief exciting causes of pulmonary phthisis, whether in systems previously healthy or otherwise, and may be largely averted by selection of a proper climate to live in and avoiding exposures, or at least they may be rendered comparatively trivial in their effects.

"These conclusions lead us, while studying the subject of treatment, to the consideration of diet, clothing, exercise, ventilation, purity of water-supply, management of children so that they shall be the least liable to catarrhal sequelæ; proper method for maintaining a perfect circulation, normal temperature, cleanliness of the skin, etc.

"Injudicious and too-frequent bathing is injurious, and therefore should be avoided.

“Early arrest of the disease should be attempted, whether it manifests itself simply as a local lesion or is complicated by dyscrasia. The outline of treatment, with this end in view, is embraced under three heads: 1. Food, which should be nourishing and easily assimilated; 2. Chest-expansion, which is the best means of fortifying against the occurrence of inflammatory diseases, and at the same time secures functional activity of the lungs; 3. Climate.

“Cod-liver oil was regarded as an agent of nutrition, and many times can be made more useful by the addition of phosphates, iodine, etc., which increase the general nutrition of the blood. Ammonia and quinine were mentioned as drugs to be employed: ammonia because it is a diffusible stimulant, and favors the removal of mucus; quinine because it has the power to diminish the temperature and prevent degenerative changes in the tissues.”

ACTUAL CAUTERY.—Dr. Bounafort, of Belgium, has devised the following for application to the neck of the womb: nitrate of potash, one part; wood-charcoal, twenty-eight parts; powder of gum arabic, four parts; water, q. s. Mix thoroughly and mold into sticks the size of the little finger and from half to three quarters of an inch long. When dry set fire to one end of the little stick and carry it through a glass or wooden speculum to the exact spot. With proper care, the patient is unaware of what has been done. Cold water is then thrown in, a tampon dipped in glycerine is left *in situ* for a month, when, if necessary, the cauterization can be repeated.

BRAND'S METHOD.—The editor of *L'Abcille Médicale* very justly remarks, in reference to the treatment of fever by cold immersion, that in order to compare it with ordinary treatment very many more cases must be collected and more time must elapse. The actual results so far are not so favorable as to justify the general adoption of the treatment.

MASSAGE IN SPRAINS.—M. Fontaine writes (*Archives Méd. Belge*) on the use of massage in sprains. He has himself had great success. M. Fontaine first covers the limb with oil, and the part is rubbed with one or both thumbs, in gentle movements, from the extremities upward, following, in general, the direction of the muscles and tendons. The affected, painful spot is rubbed gently, but the healthy neighboring parts more energetically, and the muscles at times thoroughly kneaded. This manipulation lasts from a quarter to half an hour, and is repeated three times daily. In the interval the limb is raised and bandaged.

HYDROCELE.—Infantile hydrocele is not very uncommon, and it is well worth knowing that it usually disappears spontaneously. M. Marjolin, in a communication read before the *Société de Chirurgie*, dwells strongly on this point, and has further fortified his conclusion by the parallel experience of MM. Dupuytren, Janson, and Blandin. (*Le Courier Médical*.)

VACCINATION IN ROME.—In January last the Provincial Sanitary Council of Rome, finding that animal vaccination in Rome and in the entire province was unsuccessful, unanimously urged the minister of the interior to nominate one of its members as the provisional conservator of vaccine for the commune of Rome. The minister has given notice to the prefect of Rome that in the official vaccinations in the province animal lymph is to be abandoned, and humanized lymph used, as was formerly done. (The Medical Record.)

CARBOLIC ACID AS AN ANTHELMINTIC.—In a case of tænia this acid was given at first in doses of six grains four times a day; but this proving ineffectual, two grains were ordered every hour, with the result of expelling the worm, head and body, on the third day. This acid has been recommended and employed successfully by Decal, Lemaire, and others, in

the form of clysters, for the relief of ascarides; but this is, we believe, the first instance of its use in this field. (*Allg. Wien. Med. Zeit.*)

TREATMENT OF HOOPING-COUGH.—Wild claims that he can cure every case of whooping-cough within eight days by the following treatment: the patient is not to leave his room, and at every access of coughing is to place before his mouth a small piece of cloth folded several times and wet with a teaspoonful of the following solution: ether, sixty parts; chloroform, thirty parts; turpentine, one part. (The Clinic.)

CYANIDES IN RHEUMATISM.—M. Luton, of Rheims (*Bull. Gén. de Thérap.*), extols the cyanides in acute articular rheumatism. He has used zinc and potassium cyanides. The first is a white, inodorous, tasteless powder, insoluble in water, but probably soluble by the gastric juice. He administers one grain and a half daily, either in pill or suspended by mucilage. The cyanide of potassium is administered in maximum doses of from one and a half to two and a quarter grains, preferably in silvered pills on account of its disagreeable flavor. M. Luton reports many cases, and says it is certain that cyanides cure acute articular rheumatism in its fundamental form and its diverse transformations. They cure it by shortening the duration of the disease in a marked manner, and by diminishing the risks of complications. (The Doctor.)

CEREBRO-SPINAL MENINGITIS.—Dr. Hirsch (Transactions of the Berlin Medical Society) says this disease should be ranked with diphtheria and similar infectious diseases, where a definite poison takes effect chiefly on one part of the system. It is not like typhus or malaria after a period of malaise, or without it; shivering followed by hot fit and severe headache mark the invasion. There is often a feeling

of dragging and stretching of the neck, usually vomiting, with delirium and somnolence. There is frequently tetanic stiff-neck, generalized hyperæsthesia, and convulsions, but less frequently paralysis. There is constipation, sleeplessness, and occasionally exanthematous skin-eruptions. Recovery is gradual and slow, and no proper crisis occurs. When death ensues there is coma, quick thready pulse, and collapse. Ice to the head, opiates, and local but moderate bleeding are recommended. (*Ibid.*)

VARICOSE VEINS.—Mr. Marshall (London Lancet), instead of obliterating the vein by one of the usual methods, removes several inches of it altogether. Annandale, of Edinburgh, has also performed the operation with equal success. (*Ibid.*)

BRYANT'S LINE.—A man, seventy years of age, had fallen down and sustained some injury about the upper part of the thigh near the hip-joint. He was unable to walk. There was some shortening of the right lower extremity and great impairment of movement. The actual nature of the disease was not apparent, but it was probable that there was fracture at the neck of the femur. To ascertain definitely what was the seat of the shortening Mr. Bryant adopted the following device: the measurements from the tip of the trochanter major to the lower border of the patella were first taken, and found to be equal on both sides. The question therefore was whether the shortening was at the neck of the femur. For this purpose, the patient being in bed, a vertical line was drawn from the tip of the anterior superior iliac spine on the outside of the hip to the horizontal plane of the body, then a second line from the tip of the trochanter major was drawn at right angles to this vertical line. The length of the second line was then measured and found to be three quarters of an inch shorter on the injured side than a similar line on the opposite side of the body. By this means it



was incontestably shown that the shortening of the limb was entirely in the neck of the bone. Mr. Bryant has employed this mode of determining shortening of the neck of the femur for some time past, and has found it of great utility. "Bryant's line" will henceforth be as important in determining shortening at the neck of the femur as "Nélaton's line" is in the diagnosis of dislocation of the head of the bone. (*Ibid.*)

EXCISION OF THE TONSILS.—A writer in the *Reveu de Thérapeutique Medico-Chirurgicale* for March 15th, in a note upon amygdalotomy suggested by a new guillotine, states that the operation is sometimes attended with fatal hemorrhage; but that it is never necessary to remove the whole or even the greater part of a tonsil, the cicatrization following on removal of the superficial parts alone sufficing to reduce its size; nor is it essential to operate on more than one of these organs. Strong preference is given to the employment of the guillotine over the bistoury, because of the inutility of removal of large portions and the less liability to accidents.

In support of the necessity of operating speedily in certain cases a melancholy instance is given from the practice of the writer, in which the patient, a girl of sixteen years, suffering from angina with great enlargement of tonsils, literally died from asphyxia from excision being deferred at the instance of a colleague, who thought hemorrhage would be very severe, and that the case would speedily get well if left alone.

We also find in a recent number of the *Gazette Obstetricale* some observations upon this subject by Saint-Germain and by Verrier. The former remarks that removal of the tonsils should not be done if avoidable. Even though much enlarged, surgical intervention is not always necessary; astringent gargles, cauterizations with nitrate of silver, tincture of iodine to the anterior part of the neck may be sufficient. Especially should removal not be made if the tonsils are inflamed.

Verrier refers to Harvey having thought there was some

relation between the condition of the tonsils in children from twelve to sixteen years and the development of the sexual organs; remarks that deafness has sometimes followed ablation of the tonsils, and that a useless operation is always a dangerous one; criticising the frequency of amygdalotomy, the public is so familiar with it that children are taken to the surgeon to have the tonsils removed as indifferently as to a hair-dresser to have their hair cut. But if upon examination the tonsil is found bilobed, and if it falls upon the pharynx, the operation is advisable. In operating use a tonsillotome with a large lunette; introduce a piece of soft wood between the molars of the opposite side to that on which the operation is to be done; one or two assistants will be necessary; chloroform should not be used; the child's arms and legs being held immobile, a finger passed over the tongue guides the instrument, and pressure with the finger upon the tongue causes the tonsil to project; avoid all hurry, but proceed slowly and gently in the operation. It is not necessary to remove both tonsils; take away one and cure the other. After the operation use astringent gargles.

The most serious of the accidents following the operation is hemorrhage. Laying aside injury of the internal carotid, this accident is from the large venous plexus which encircles the gland. Ice-cold and acidulated gargles, the ice-collar, ice held directly upon the bleeding surface, the water of Rabel, and the actual cautery have been successfully used. Vomiting of blood may occur five or six hours after the operation. It is not a matter of any anxiety, and the physician has only to relieve the minds of the parents. Consecutive fever is seldom seen. Wounds of the half-arches of the tongue or of the lips are accidents ordinarily of no consequence.

## Notes and Queries.

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GALENISM.—The following address, by Dr. Theophilus Parvin, was delivered before the graduating class of the College of Physicians and Surgeons of Indiana, Tuesday, March 2, 1875:

*"Gentlemen of the Graduating Class:* It is at once my duty and privilege to congratulate you upon your recent honors. The first-born of this medical school, you are the heralds of those who in successive years shall stand where you now stand, and depart as you will soon depart to exercise the noblest of secular avocations. You are to be the first living epistles, known and read of all men, asserting the fidelity of your instructors and the fitness of the College of Physicians and Surgeons of Indiana to take high rank among the medical institutions of the country. Socrates taught his disciples that they should not so much desire to be known for being philosophers as to honor philosophy by living virtuous lives; and let your chief honor be not that you are physicians, but that your professional lives shall bring new glory unto medicine.

"And now in this final hour, amid all the glad emotions of success, of hope, of ambition incident to the occasion, before these witnesses attesting their deep concern in your entrance upon professional life, in this temple of the living God, what farewell words shall be uttered, what final counsels are most suitable, and how can I contribute in some slight degree to your future usefulness, happiness, and honor? The usual topics for such occasions—the trials, responsibilities, rewards, and general conduct of professional life; its temptations, its progress, its philanthropic character, its true glory, etc.—are indeed very old and familiar; they have been presented again and again with all the graces of rhetoric and all the powers of eloquence. Old and familiar though they are, they can never be trite and forever cast aside. In this regard history repeats itself; they recur as the seasons recur; they come as like

periods of life in individuals of successive generations. The tale of love is an old one—old as Eden—but immortal as the race. It was uttered before the Red Sea swallowed up the Egyptian host; uttered before the Roman eagles swept over Judea; uttered beside the plashing of Galilean wave, or amid the dark recesses and beneath the rustling leaves of olive-groves. This mighty passion burned in Leander's bosom unquenched by the Hellespont; it glowed in Petrarch's verse, and until the end of time some beautiful Genevieve will be learning

‘All thoughts, all passions, all delights,  
 Whatever stirs this mortal frame,  
 All are but ministers of love,  
 And feed his sacred flame.’

The love of parent for child is the same now as when the old patriarch wept over the bloody coat of his beloved son, or when Israel's monarch bewailed the dead Absalom, or when the widow of Nain followed the corpse of her only child to the burial-place, or when another mother climbed the Alpine cliff, so steep that hardy mountaineers dared not, to rescue her babe from the eagle's nest. Valor and patriotism, these are old, these are new; Leonidas and his companions at Thermopylæ; Horatius

——‘facing fearful odds  
 For the ashes of his fathers  
 And for the temples of his gods;’

Arnold Winkelried gathering into his bosom a sheaf of Austrian spears, and thus making way for liberty—are historic figures representing sentiments that never die. The sweet lullaby that hushed many an infant to its rest to-night was sung, and the simple prayer that in many a Christian nursery floated from child-lips heavenward was uttered long years before the land was girdled with railroads, or ocean surface plowed with steam and its depths made the whispering-galleries of the nations. Spring is coming—is coming with the breath of the warm south wind, with verdant fields, bursting bud, unfolding leaf, with blooming flowers and the sweet carolings of birds—but she has no treasure differing from those she brought in the years gone by, or will bring in the years to come. And if to-night I utter a tale much more than thrice told—repeat that which was said long before we were born, and will be said long after we are buried—it is because like occasion

invites like thought, and the work of the physician is the same from age to age.

“The late Sir James Simpson, in an address at the University of Edinburgh many years ago, stated that it was the custom in some ancient continental universities to present the graduate on the day he received his doctorship with a ring, a barett, an open and a sealed book. The study of these symbols will give us an ideal of the medical character, a picture of the medical life.

“The ring represented the marriage of the physician to medicine. Here is thy bride to have and to hold, for richer for poorer, for better for worse, to love and to cherish until death do you part; a bride whose beauty and grace will more and more unfold with each passing year, and hold a loyal heart in willing bonds. Coleridge once playfully remarked of Southey, whose devotion to books was constant, that his library was his wife. Now it is not suggested that celibacy is the normal condition of a doctor, and that he should have no other wife than his profession. That would be an exceedingly ungracious utterance to those of you who are already in the paradise of matrimony, as well as to the rest, who doubtless intend entering therein at the earliest opportunity; ungracious too in the presence of so many of the gentler sex, among whom there may be some fancy-free maiden who has wisely decided that a medical gentleman would be the most desirable of life-partners. So far from holding to such heretical creed, I believe the doctor, like the bishop, should be the husband of one wife. Indeed I know of many instances where his professional happiness and usefulness were largely the results of a wife’s intelligent and loving help. A most interesting volume might be written upon doctors’ wives, showing how they had contributed not only to these ends, but also materially assisted their husbands in professional and scientific investigation. A few years since a talented physician and medical teacher of Columbus, Ohio, published a book of original study. This book was enriched by skillful engravings that were the admiration of scientific men at home and abroad. Now these engravings were his wife’s work. Her artist-eye and cunning hand, stimulated by wifely love, accomplished that which professional engravers shrunk from attempting.

“However, married or single, the physician must constantly remember that medicine is his great work in life. No other occupation can be permitted to come in conflict with it; and that if,

Atalanta-like, he turn aside to pick up a golden apple, he may miss the goal. To work, to work with all our might, is one of the great laws of our existence; and it is a sad thing if a man does not love his chosen or allotted labor with his whole soul. Now medicine is worthy the purest love and noblest consecration. More than four centuries before the Christian era—about the time indeed that the divine old man of Cos was laying the foundation of medical science—one of the greatest of Greek poets makes the baffling of disease an evidence of man's extraordinary power. In the *Antigone* of Sophocles the following passage occurs: 'Many are the mighty things, and naught is more mighty than man. He even sails beyond the seas when whitened into foam with the wintry south wind's blast, passing amid the billows that roar around; and the supreme of divinities immortal, undecaying earth, he furrows, his plows circling from year to year, turning up her soil with the offspring of the steed. Ensnaring the swift-winged birds, he bears them away as his prey; and the tribes of the monsters of the wild, and the marine race of the deep in the inwoven meshes of his nets, he, all-inventive man; and he masters by devices the tenant of the fields, the forest beast, and he will bring under the dominion of the neck-encircling yoke the shaggy-maned horse and the untamable mountain bull. And he hath taught himself language and lofty wisdom, and the customs of civic law, and to avoid the cold and stormy arrows of uncomfortable frosts. . . . Only this he can not do, find escape from the grave; but he has devised remedies to baffle disease.' Another heathen writer spoke of the physician as 'the hand of God;' and when the Word was made flesh and dwelt among men one of the frequent manifestations of infinite love and power was in healing the sick. Surely we may claim for medicine a celestial origin, a divine lineage, and she is worthy any man's espousal. Take this divinity as yours, accept this bride; for in her right hand she offers virtue and truth, and in her left hand philanthropy and gratitude, while to some few—very few indeed—she grants honor and riches.

"It is hardly necessary to insist on these latter points, nor shall I do it other than to introduce as to one of them a noble passage from Sydenham, who seems to stand out among British physicians, as we look back upon him through two centuries, very much as Edmund Spenser among early British poets, each surrounded with deathless glory. It will show that Sydenham had little honor in



his life-time, and that he did not regard it as of much value. The great physician has been thanking a professional brother who has written him in approbation of his works, and states that he has seldom received any thing of this nature, and then adds in golden words: 'Yet, notwithstanding I endeavor all I can, and will do so, to learn and promote the curing of disease, and to instruct those that are less conversant in practice than myself, if any such there are, let other people think of me as they please. For, having nicely weighed whether it is better to be beneficial to men or to be praised by them, I find the first preponderates and much conduces to the tranquillity of the mind; but as for fame and popular applause, they are lighter than a feather or a bubble, and more vain than the shadow of a dream.'

"A barette was also given the graduate, signifying that he was now a priest, and called to the exercise of priestly functions. You need not be reminded that in former times—among the Jews, the pagans, and the Christians—the sacerdotal and medical offices were frequently united, the priest being the physician; and while in all civilized countries this union has terminated, yet there are striking analogies between medical and priestly functions, and intimate relations between medicine and religion. The priest was the interpreter of the law, the minister of comfort to the sorrowing, and made sacrifice for the sinning. The physician too is the interpreter of law, law as divinely instituted as any written upon tables of stone or uttered by prophet-lips when touched with hallowed fire; and he too ministers to those who suffer, bringing pardon or at least mitigation of punishment.

"Medicine in its scientific aspect studies laws; indeed the simplest definition of science is the knowledge of law; and probably there never was a time in the history of human thought and scientific study when the prevalence of law was more generally and earnestly insisted upon. Yet we can turn from Huxley and Herbert Spencer to one of the great lights of the English Church, more than two centuries ago, and find declarations as positive and comprehensive as any that meet the ear in modern times. Take this passage from Hooker's *Ecclesiastical Polity*, a passage which for vigor of thought and splendid rhetoric has rarely been equaled, and tell me if its inclusion is not large enough for all subjects of human study in science, our own among the number: 'Of law there can be no less acknowledged than that her seat is the bosom



of God, and her voice the harmony of the world. All things in heaven and on earth do her homage, the very least as feeling her care and the very greatest as acknowledging her power; both angels and men and creatures of what condition soever, though each in different sort and manner, yet all with uniform consent admiring her as the mother of their peace and joy.' There can be no antagonism; nay, there is harmony between medicine and theology thus presented. So too the following passage from one of the most brilliant of modern writers (Ruskin) would receive the complete assent of most physicians: 'As you know more and more of the created world you will find that the true will of its Maker is that its creatures should be happy; that he has made every thing beautiful in its time and in its place, and that it is chiefly by the fault of men, when they are allowed the liberty of thwarting his laws, that creation groans or travails in pain.'

"However, disobedience to law is frequent, and the peace and joy are disturbed, and creation does groan and travail in pain. Not only do the violators themselves suffer, but they often involve others in a common calamity, like the blind Samson. And when the innocent—innocent so far as directly transgressing—suffer, are we, the priesthood of medicine, to read off God's decrees, and pronounce the suffering punishment for some moral cause? Not thus did a famous physician years ago, as the following incident testifies. Passing along with some of his pupils, a case of blindness in an adult, most probably congenital cataract, was presented him, and those pupils were anxious to know the cause of this affliction. It could not be a punishment for his own sin, for he was born blind; but had not his parents done something very bad? The answer came promptly from his lips, silencing those unjustly-judging pupils: 'Neither hath this man sinned nor his parents, but that the glory of God might be manifested,' and he immediately gave him his sight. The glory of God manifested in giving vision to the blind man; and is it too much to say that the physician, in his daily work of healing the sick, is also manifesting that glory? And then is it too much to claim for medicine that she especially meets the two great ends which Lord Bacon declared the true objects of human learning, 'the glory of God and the benefit of man's estate.'

"So far as personal religion on the part of the medical practitioner is concerned, let me say it can hardly be thought, even by

the most skeptical, that a true religious faith and practice militate in the least against the performance of professional duties, or detract in the slightest from the excellence of medical character; nay, rather that they assist the one and enhance the other. No one will judge Boerhaave a weaker man because he spent the first hour in each day reading the Bible and in prayer. No one will think that one of the most extraordinary men of the century, the late Sir James Simpson, should have any less honor because he took an active part in religious meetings; nor will the reader abate a tithe of his admiration for Thomas Sydenham when he finds in his tract on dysentery that the gifted author pauses in considering the disease to utter the words, 'And truly I can not here forbear mentioning with gratitude that Omnipotent God, the giver of all good things, has not provided any other remedy for the relief of wretched man, which is so able either to quell more diseases or more effectually to extirpate them, than opiate medicines taken from some species of poppies.'

"The other presents received by the graduate were an open and a closed book; the one signifying the knowledge already obtained, and the other that which he should diligently seek.

"No matter how faithfully a student may have worked during his medical pupilage, he has only entered the vestibule of a vast temple, only touched upon the shore of an immense continent. It is to be feared that many relinquish study, or at best become only case-readers. The reasons for such neglect of systematic study are in part the natural indolence of the human mind, the diversions of social life, the temptations of business speculations or of political management, and above all a want of true love for medical knowledge and of just appreciation of its value.

"Disguise it or explain it as we may, there sometimes is a downright antagonism between Young Physic and Old Physic; the former being disposed to exaggerate the value of knowledge derived from books and teachers, while the latter, who has seen the rise and fall of so many theories, and has seen too material changes in therapeutics, trusts chiefly to that knowledge derived from his own personal observation and the

'Old experience that doth attain  
To something like prophetic strain.'

"Young Physic commences his professional career brimming with good resolutions; his brain is full of theories, pictures, and

definitions; he is cognizant of all bones, muscles, nerves, blood-vessels; knows all the fanciful names with which the old anatomists were so generous, from trees of life, forks, bridges, triangles, etc., to Turkish saddles. He is familiar with all the wonderful instruments of modern medical research, and has invested some of his last dollars in supplying himself with a goodly share of them. He can enumerate and describe diseases, and is omniscient of *râles* and *rhonchi*; and not to multiply his qualifications, as the crown and conclusion of his scholastic attainments, can repeat the barbarous terminology of recent chemistry without fracturing his tongue. His diploma he possibly regards as a certain passport to public favor, an open *sesame* to the homes of the sick.

"But Old Physic, who perchance never attended more than one course of lectures, and that thirty or forty years ago; whose library of venerable volumes might be carried in a market-basket, and who is careless of medical journals, but who has the unpurchasable knowledge drawn from intelligent experience, keeps most of the practice, and his ambitious young rival becomes disgusted at the want of public appreciation, murmurs against it very much in the spirit, though of course not in the manner, of the complaints by Tennyson's 'Northern Farmer' when he has to die, suggesting that God Almighty does not know what he means in taking him:

'A mowt 'a taaken Joanes, as 'ant 'aapoth o' sense,

Or a mowt 'a taakin Robins—a niver mended a fence,'

and in his disgust declares there is no use in studying. Where such conditions exist there is a mistake on the part of each. Each has knowledge that would be beneficial to the other; and if there were always, as there oftentimes is, a mutual recognition of this fact, they can be wonderfully helpful to each other.

"But this error is not the only one Young Physic commits in relinquishing his studies. No matter how slow the public may be to recognize his qualifications, no matter even how greedily they may run after all manner of quackeries and medical abominations, let him patiently bide his time, strengthening himself for those responsibilities which are sure to come to every faithful worker in medicine, responsibilities that are sometimes of almost crushing weight. Immediate entrance into a large practice, whether obtained by accident or by cunning and dishonesty, is generally an unmitigated curse to the young physician. Neither will natural indolence nor disappointment at delayed success, either leading to neglect of study,

be excused by the remark sometimes made, 'I am not going to practice in a city, nor even in a town, only in a village, and I know enough for a country doctor.'

"Here again two or three grievous errors. Human life is just as sacred, disease just as difficult of comprehension in the country as in the city; and there are country doctors that are the peers in medical knowledge, in culture and professional skill, of any of their city brethren. Country doctor indeed, and consultant many miles and hours away, with some one of those terrible emergencies pressing upon you, a human life trembling in the balance, emergency taxing the wisdom and skill of the highest, how can any mediocre attainments satisfy either your intellect or your conscience!

"Country doctor indeed, and therefore no grand achievement for you, no great discovery to be made!

"Within the first decade of the present century a country doctor in Kentucky made the greatest surgical triumph of the century, opened the way by which hundreds of human lives have been saved, and he became the teacher of the professional world. Some time in the sixth century one of the most horrible and fatal diseases was first observed. It raged unchecked among the civilized and savage, devouring human beings as Saturn his offspring, until millions and millions were its victims, France alone contributing thirty thousand every year. It raged unchecked for twelve centuries; but in the year 1776—immortal in the history of this republic, immortal in the history of medicine—there was the dawn of the grandest discovery ever made—a discovery which was to rob death and the grave of these untimely victims, saving more lives than all the wars since then have destroyed—and he who made it and successfully worked it out to its great conclusion was only a country doctor! Ah! the names of Ephraim McDowell and Edward Jenner can no more be blotted out from the annals of medicine than the stars from the firmament.

"Now surely with such illustrious examples no one will wrap the garment of sloth around him and lie down to pleasant dreams. The Master one day will demand his own with usury. Dream with the sublime possibilities which stand in the foreground and beckon you on to triumph, or at least heroic endeavor. Dream, with so many treading the *via dolorosa* and sinking into premature graves. Dream, with *Misereres* rising from every land and floating on every breeze. Dream, with that closed book vastly larger than the one

you have opened and studied; that closed book whose pages no mortal, even unto the latest times, shall ever fully master, but which in their richness of knowledge and affluence of blessing are a true El Dorado. No, other things are believed of you. Hopes bright as day mantle your future. See to it that the world is better for your living in it, that medicine is exalted in your hands, and the people will rise up and call you blessed.

“Did time permit, many other topics involving your future conduct might be presented. For example, your relations with members of the regular profession; and I would urge you to beware of even forming, still more of expressing, hasty opinions, either favorable or adverse, for few persons move in active life without veils; and also to beware of hasty friendships and confidences. So far as so-called irregular practitioners are concerned, personally let them be treated with such courtesy as their social character may entitle them to, having no concern or criticism for their medical beliefs. While you condemn dishonorable conduct in high or low, never meet violations of professional honor by corresponding acts on your part, and thus getting even, as it is said; rather make the golden rule your guide, as you would they should do unto you. You will be astonished and pained sometimes to find that men in their greed for gain, or from some natural moral obliquity, men from whom you would expect better things, will be guilty of conduct in reference to getting or keeping patients, the counterpart of which in high-toned commercial circles would be regarded as dishonorable and dishonest, and that the Code of Ethics generally adopted by medical organizations, even if it were ten times more stringent, can never right all these wrongs or prevent these evils; but the derelictions of others should only induce greater circumspection on your part, so that you shall acquit yourselves in all emergencies not only as skillful physicians, but as high-toned gentlemen.

“I should like to urge upon you the importance of keeping a daily record of your practice; of being not only readers of some of the best medical journals, but also of being contributors thereto as occasion may offer; of connecting yourselves with local, state, and national medical organizations; of not only diligently pursuing your professional studies, but also of cultivating some science or art allied to medicine in part as recreation and discipline, and in part for the positive help it may be. Some acquaintance too with

general literature ought also to be the possession of every member of a liberal profession.

“What is to be your treatment of female practitioners? No matter what you may believe on the abstract question of women studying medicine, these are to receive all the professional courtesies you would give to those of your own sex having similar qualifications.

“A word as to suits of malpractice which just now are threatening to become in this state epidemic, or rather *epimedic*, if such a barbarism can be tolerated. Never advise, never countenance one of these, no matter what the provocation or who the prosecuted. Better that nine guilty men should escape than one innocent man should suffer is, I believe, one of the humane maxims of the law; and if this be true, no suit for malpractice has ground to stand upon a single minute.

“The pathway upon which you have entered has its thorns, its glooms, and its perils. You can not always command success, and you will sometimes meet with unjust censure. The defection of fickle friends, the misrepresentations of envious rivals, your mistakes—for doctors are not infallible, and mistakes you will sometimes make—and the imperfection of our art will try you as the furnace tries the gold, as the storm tries the mountain-rooted oak. Only see to it that you are purer for the fire and stronger for the storm. But the pathway has its fragrant flowers, its golden sunshine, and the good is vastly more than the evil.

“Summon up all your energies for the conflict; gird yourself for the race; accept humbly but bravely your God-given labor, and you can not fail. The commander in a great battle is doing a sublime work. Those thousands and ten thousands of soldiers are mere automata, moving obedient to his will. Now, with all the horrible enginery of war, he holds them in his hand like thunderbolts, and now he launches them forth on their swift mission of death, and writes in the wreathing cannon-smoke and in the writhing bodies of prostrate foes that one word supreme in his mind—victory. So too the leader of a great orchestra, an orchestra of many voices and instruments: at a look, at a gesture from him, silence is no more, the great deeps of sound are broken up, and the flood pours forth, wave upon wave spreading wider, swelling higher, billow surmounting billow, as if to rock the deep foundations of the earth and assault the very heavens with tumultuous



raving; but the magic wand of the leader guides all these separate forces, compels and combines all these mighty utterances into one common harmony, into one sublime melody. But grander, sublimer than aught ever accomplished on battle-field or orchestral stage is the bringing a human soul in harmony with divine law, concentrating and combining all its high powers upon a single noble purpose in life, subduing all evil passions, and kindling upon its altar a flame of celestial light and love. This is a victory bringing an immortal crown. This is a music whose sweet melodies shall float beyond the stars, and may endure when the stars shall perish. Unto this eternal harmony and unto this sublime victory, my brothers, are you called to-night.

LIQUOR FERRI PERCHLORID IN CANCEROUS ULCERATION OF THE UTERUS.—Dr. Gibb (*British Medical Journal*) states that he was induced to employ the solution of the perchloride of iron in such cases from observing its beneficial action in an obstinate case of hemorrhage arising from enlarged vascular granulations in the uterine cavity. He gives the history of four cases in which the application of the solution was more or less useful, but he draws a distinction as to the chances of success between the cases where the cancer is hard and embraces the whole of the uterus and those where the disease is epitheliomatous, spreading over the vagina, and throwing out toward the surface exuberant vascular fungoid granulations.

In the latter Dr. Gibb thinks that the application of cotton-wool soaked in the solution of iron clears away the greater part of the diseased growth, allows reparative efforts to be made by the comparatively healthy structures underneath, and hastens cicatrization. When the disease is purely epithelial and chronic and rodent in character, and confined to the surface, the treatment described has done most good, and appears to Dr. Gibb to cure even bad cases.

The application rarely causes pain, except where the solution has accidentally flowed over the adjacent parts, which have been thereby blistered and painfully excoriated. He



therefore takes care to limit the application to the diseased part alone. He has always used the strongest pharmacopœial solution undiluted, as he wishes to secure a caustic action. At first he applied it on a piece of sponge or lint, but finally he found cotton-wool to answer best, as this sucks up any quantity that may be required, parts with it easily, and can be molded into any form, so as to fill a cavity or cover over and adhere to any growth.

THE ALDEN CORPSE CREMATING COMPANY.—The following readings on the coming funeral urns are suggested by a California paper: "Chas. Pupker, 3¼ lbs., cremated July 9, 1879. For wife of above see third pickle-bottle on next shelf. Little Tommy, burnt up September 16, 1881. Jane Matilda Perkins, October 3, 1883. Put up by the Alden Corpse Cremating Company. None genuine without signatures."

DR. D. W. YANDELL:

I have just read Dr. Gross's valedictory address. I do not propose any review of it. It contains a single paragraph, however, to which I wish through your journal to call attention. Not as an opinion peculiar to Dr. Gross—it is entertained by many—but as this is the most recent public expression of it, I ask a moment's consideration of it.

Touching the education of medical men, he says, "I should first and foremost exact as an essential prerequisite that every youth applying for admission into our ranks should be a gentleman; secondly, that he should possess a respectable amount of brains; and thirdly, that he should have a good English education, with a sufficient knowledge of the Greek and Latin languages to enable him readily to comprehend and master the technicalities of his profession." To this end he would enforce a longer period of preparatory study.

Is it not time that the medical men of this country were setting their faces against the wonderful facility with which

doctors are made? The professors in the cities and the practitioners in the country are alike responsible for this lamentable state of things. Doctors are made with more readiness than a common handicraftsman. An uncouth country-boy can not be taught to make a saddle as readily as we teach the same youth to medicate the ills which flesh is heir to.

A very common answer to this position is that these unqualified men soon drop out of the profession and out of sight. They should never have been in the profession. They derogate from its dignity, for they start off with its honors—its degree of M. D. Dr. Gross says, "Few persons are aware that medicine is a great study, requiring a high order of intellect, vast research, and incessant training for its successful practice. Many persons look upon us as if we were so many mechanics, artisans, or tradesmen, forgetting that it takes brains to make a doctor."

Do not our schools prove to the world every year that the people's estimate is well founded? A boy that can not run a straight furrow or drive a nail or make a respectable martin-box is very good material out of which to make a doctor. If he can not read with any fluency a newspaper paragraph nor write with any accuracy a domestic letter, he is still scholarly enough to take in and add to the literature of a profession which is said to be "learned."

Is it not time, I say, that the medical men, practitioners and professors, in country and city, should *demand* a little more? I think so.

MEDICUS.

# THE AMERICAN PRACTITIONER.

JUNE, 1875.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### ON THE ETIOLOGY OF INFANTILE ECZEMA.

BY R. W. TAYLOR, M. D.,

*Surgeon to the New York Dispensary Department of Venereal and Skin Diseases; one of the Physicians to Charity Hospital, New York, etc.*

I desire to call the attention of my readers to a consideration of the etiology of eczema of infants. My attention has long been directed to the unsettled condition of opinion upon this subject, and I have endeavored by carefully studying, uninfluenced by any theory, a large number of cases to arrive as nearly as possible at correct conclusions. I think that such a study is at present much needed, in view of the utter want of harmony of opinion among men of authority, and of the fact that a clear knowledge of the cause of a disease is in reality the starting-point for its proper study and treatment.

It appears to me that a doctrine which teaches that every case of this affection is due alone to external causes is too dogmatic and subversive of a broad and extended study of facts. The assertion that it is simply the expression of a number of ill-defined diatheses is not borne out by the teach-

ings of the clinic. Finally the view that some vague internal morbid condition is the active cause requires for its belief a full and lucid statement of what that condition really is. The simple statement of this unsettled condition of opinion is sufficient to show the necessity for its careful and systematic consideration.

In the first place now let us consider whether eczema may be caused in the infant by certain diatheses or conditions of the economy predisposing to disease. I shall not waste time and space in treating of the darts or herpetic diathesis, as I regard it as an injurious theory, almost wholly unfounded upon facts, and detrimental to intelligent study. In the proper place I shall consider the facts which I think have been used in the elaboration of this theory. There are, however, certain transmissible conditions which require attention—namely, the rheumatic and scrofulous diatheses—while the syphilitic diathesis, being specific in nature, is not comprised in the list of the probable causes of eczema. The question now for our solution is, do these diatheses predispose to the development of eczema in the infant? Admitting the fact of the transmission of rheumatism, the point which concerns our inquiry is at what age and in what forms does it show itself? and again, does it manifest itself in early infancy? As a general rule, I think it may be answered that the rheumatic diathesis when inherited is late in the evolution of its morbid processes. Thus clinical observation shows that in infancy such subjects are apparently healthy, and that in those exceptional instances in which an early evolution takes place the lesions are those of the joints and fibrous tissues. Later in life the manifestations may be more general, and then we may find that the integument is implicated. The same general course is seen when the diathesis is of the acquired form.

I do not discuss here the reasons why this diathesis is thus tardy in showing itself, as it has no bearing on the subject at issue. As I have said, there are cases in which rheumatism

commences early; but, according to my observation, the skin is not one of the tissues liable to be implicated.

In support of what I now advance, by reasoning upon generally-accepted facts, I may state that among the large number of cases of infantile eczema which I have carefully studied as to their etiology there was not one in which I felt that I should be correct in considering it as originating in rheumatism, hereditary or acquired. I can readily understand that by loose reasoning an observer may arrive at this conclusion. Thus he has presented to him an eczematous child, the offspring of parents or of a parent who has the rheumatic diathesis, and he seems warranted in assuming that the skin-affection in the child was due to the rheumatic condition of the parent. The coincidence, however, far from warrants the conclusion. To settle such a point it is necessary to establish the fact that the diathesis of the parent existed prior to the child's birth, and that it inherited it; then it would be necessary to determine the exact relation between the acquired diathesis and the skin-affection. Taking therefore into consideration the facts of the late evolution of the rheumatic diathesis, and of the immunity of the integument, as shown by clinical observation, to the development of its lesions at early periods, I think we are warranted in leaving out this condition as one of the probable causes of infantile eczema. At some future day I propose to study the relation of rheumatism to the eczema of old persons.

This brings us to the question as to whether the affection can be or is caused by the scrofulous diathesis. Previous to this, however, let us determine, if we can, what is meant by the word scrofula. In the light of our advancing knowledge this state is no longer looked upon as a specific or quasi-specific diathesis, while its true nature is being gradually understood. In another place,\* and with a different purpose,

\*Syphilitic Lesions of the Osseous System in Infants and Young Children, page 172. New York, 1875.

I have thus summed up the essential nature of this condition, and the description will apply to my present study. I there say that in the scrofulous state children are pallid and weak, and their assimilative processes are far from perfect. They present lesions of a hyperplastic character, indicating a low state of the natural processes. These hyperplastic changes are shown in glandular engorgements in tendencies to active hyperæmia of the various organs and tissues, particularly of the serous and mucous membranes. In such subjects inflammations are quickly excited, are very severe in character, and are attended with the production of large quantities of pus. Accompanying this condition the blood-making functions are impaired and the general action of the viscera is perverted. Besides active inflammation, low grades of hyperplasia of tissues are also observed. Now this condition, which for want of a more precise word we call scrofula, may be hereditarily transmitted, or it may be engrafted upon the organism of the infant by various causes, such as exhausting attacks of the exanthemata, adynamic fevers, and by the results of poverty. In some instances a naturally-delicate constitution is thus modified by a persistent dyspepsia impairing assimilation or by chronic diarrhea. These are the main deviations from health which, I think, constitute what we now call scrofula. In the supposed relation between this state and syphilis there is in fact no transmission of a specific condition. If in the offspring of a syphilitic person an enfeebled organism such as I have pictured is observed, there is nothing of a specific nature in it; it is simply a debility with its concomitant features, remotely due to the impairment of nutrition produced by syphilis in the parent. I am here speaking of cases in which syphilitic lesions are not observed in the child, and whose parents or parent had passed through the specific stage of the disease. As to the matter of therapeutics it is well to understand the non-specific nature of this condition, since antisymphilitic remedies are not indicated.

This then being the condition or diathesis, the question arises what relation exists between it and eczema? or, to be more precise, is eczema one of its manifestations? My opinion in this matter is that the relation, if such exists, between this condition and this skin-affection consists in the tendency to hyperæmia and hyperplasia, which is induced by the general systemic disturbances. The change in the quality of the blood which necessarily follows the general scrofulous condition I believe has not any material influence, at any rate, as an excitant in the production of eczema. The essential cause of the eczema resides in the tendency of the cells of the structure to undergo active proliferation, and in the ready excitability of the vascular system to severe engorgements. Then again there are certain points to be considered relating to the integument itself. Consisting of a framework of young, actively-growing cells, copiously supplied with blood-vessels and nerves, and being placed in a position where it is subject to constant friction, and to the irritation of heat and moisture, etc., it contains within itself and is surrounded continually with those elements which are prone and liable to induce inflammation.

The purport then of our studies thus far shows that the relation between scrofula and eczematous eruptions of the skin consists in the tendency which the diathesis ingrafts upon the latter to inflammation of greater or less extent or severity. In this tendency there is nothing unusual or specific, but in truth the same is impressed on each and every organ or tissue, and the reaction of such, as judged of by the inflammatory process, is shown in proportion as any of them are subjected to irritation. This statement fully disposes of the second question which I laid down; namely, is eczema one of the manifestations of scrofula? Eczema of such children bears the same relation to the systemic condition that a bronchial catarrh does to it, or in fact any hyperplasia even of subacute character. In all such cases I am inclined



to think that the starting-point of the skin-lesion is some local irritation, however slight, and that the same pathogeny obtains in case of the bronchial membranes. I do not think that the eczema begins in the majority of these cases without an exciting cause any more than a bronchial catarrh would or does. We may be unable to determine the exact causes, but such generally have existed, though perhaps they were not recognized. In many of these cases I have seen a very insignificant inflammation give rise to extensive patches of eczema; thus a small furuncle may form on the head, and owing to the predisposition an eruption of eczema involving large surfaces may result; or again, in some cases a few hair-follicles of the scalp become hyperæmic; they are scratched, owing to itching, and eczema results. In the vast majority of cases, if strict inquiry is made, the fact will be elicited that the affection began in a localized apparently insignificant manner. This mode of evolution points to a primary local origin, and differs strikingly from the mode of development when symptomatic or excited by internal causes. Under these circumstances a large area is usually first involved, or symmetrical organs are attacked, indicating that the affection is caused by a systemic condition. Thus, I think, our studies will thus far warrant us in stating that eczema of scrofulous nature does not bear the same relation to the general condition that syphilitic eruptions hold to the syphilitic dyscrasia, in which case they are specific manifestations; but that it is an epiphenomenon casually developed, and that its beginning and course are favored materially by the predisposing condition of the economy.

Too much stress can not be laid upon the proper appreciation of these facts in the matter of therapeutics; for they clearly indicate the necessity for the removal of the qualifying influence, in order not only to cure the existing affection, but also to guard against future attacks. Thus, though we admit a scrofulous form of eczema, it must be understood to arise

in the modified manner I have described. Though in this condition there is a tendency in all tissues to active inflammation, yet that process is not set up unless under excitation; consequently we should err scientifically if we boldly say that there is a scrofulous bronchial catarrh or a scrofulous eczema, meaning that they were the manifestations or outbursts of the condition.

In order to prepare for the proper appreciation of the therapeutical indications, I may here say the eczema of this origin is somewhat peculiar. It invades, as a rule, extensive surfaces, is profoundly seated in the integument, as judged by the thickening, and is attended with the production of large quantities of pus, is rebellious to treatment, and more than ordinarily prone to relapse.

We now come to the consideration of the question whether eczema as a skin-affection alone is hereditarily transmissible in the absence of an accompanying diathesis. Hebra, without entering minutely into this matter, decides the question in the negative, and authors generally think that the occurrence is possible together with a general diathesis. Dr. Tilbury Fox is certainly the most explicit on the subject; and, while he does enter largely into its discussion, concedes that eczema may be handed down from parent to child. Upon the solution of this question a number of very important considerations hang, and by it light may be thrown upon the etiology of other cutaneous affections as well as those of other tissues.

In order to argue the point fully let us formulate the question in a definite and scientific manner. Thus it can be put with more force as follows: Can a tendency to the development of eczema in the integument be transmitted hereditarily without the implication of the general system? In other words, can a local tissue-tendency of which the parent has become the subject be transmitted to the child without any other deviation from the normal standard of the organism? Though not very frequent, cases in which eczema

is observed in parents and offspring are sometimes seen. I have observed such, and after having carefully studied them I have been unable to determine any other morbid predisposition of the economy; in fact, the patients seemed in perfect health. Then again other similar but less marked cases are often met with in practice. Thus there are whole families, parents and children, each member of which has an integument of great delicacy and fineness of structure, upon which very slight external causes produce very active inflammation very quickly. In such subjects reflex influences may often be traced as producing cutaneous hyperæmia. Under these circumstances, and in view of these plain, undoubted facts, can there be a reasonable doubt but that a tissue-tendency or predisposition to inflammation has been inherited by the offspring? This same peculiarity is often observed in the mucous membranes, which in children are sometimes susceptible of the various grades of inflammation in the same manner and under like stimulus to its production in their parents. Explained according to a humoral pathology, such instances would be simply those of some unfathomable diathesis, and certain undetermined and vaguely-described blood-conditions would be set down as their cause. Such an explanation, however, is neither satisfactory nor scientific. Let us go a little further. There are a number of skin-lesions which are undoubtedly local, and are thus transmissible. Shall we conclude that they are the expression of a diathesis? For instance, ichthyosis is often transmitted to children from parents. Is there then an ichthyotic diathesis of which the skin-lesion is merely the expression? Again, we sometimes observe a condition much less marked than this affection, which we call xeroderma, which in a local or general manner may be inherited by offspring. Are we then to explain this case by the assumption of a somewhat modified ichthyotic diathesis? Examined with care and without prejudice, and unbiased by preconceived theories, these parents are found

to be healthy and to present no other morbid predisposition. In what then has this tissue-change originated? Again, we find more advanced structural lesions of the skin, such as nevi molluscum, warty growths, and sarcomatous infiltrations, in the offspring similar to what were observed in the parents. Now these are strictly limited deviations of tissue-development. Shall they be explained by the existence of an inherited blood-condition which causes them? Other points equally suggestive and conclusive may be urged. Thus Dr. Brown-Sequard has recently shown by experimentation that tissue-change both in the skin and nervous system, as well as induced deformities, may be and are transmitted from parent to offspring without the system or the blood being involved. These experiments are powerfully convincing against the opinion that a blood-condition or diathesis was handed down, as the lesions were observed in the lower animals who were healthy, and in whom no such diatheses are known to exist. What then is the explanation of these phenomena of heredity? If we endeavor with the most captivating arguments to establish a condition of the blood and general system as being the cause of these tissue-changes, we have in the end simply a more or less plausible theory which the fact of the cases will not really warrant. Indeed I am of the belief that in general no abnormal condition of the system exists. On the contrary, is it not more in accordance with the facts presented to consider the lesion of local origin? Such an explanation requires no straining of the reason for its acceptance. As we can detect in neither parents nor children any deviation of health in any way connected with the tissue-change, is it not more in accordance with the facts to conclude that in this instance of hereditary transmission one part of the organism is perpetuated in a slightly abnormal state rather than that the whole fabric is in some occult and undeterminable manner diseased? Certainly one diathesis or morbid state can not be cited as the origin of all these cases of local hereditary tissue-

lesion; and if such is their origin, their causes must be various. Yet we are wholly unable in a scientific manner to say precisely what any of these general morbid conditions are, or in what particular manner the blood is abnormal. Now it might be suggested that the tendency to inflammation of the skin and its liability to structural change as hereditary phenomena are not comparable, yet such an assertion can not have, to my thinking, any strong facts to support it. In each instance there is a morbid predisposition which we positively know exists: the one is toward ephemeral and oft-repeated change, as in eczema; the other to permanent alteration, which also may occur several times. The condition which underlies both tendencies is, I think, somewhat similar, and differs, as far as we can decide with our now known facts, only in degree. In eczema there is a tendency of both the cells to hyperplasia and of the blood-vessels to hyperæmia, whereas in structural lesions the hyperplastic process is far in excess of the hyperæmic. These considerations and facts (and equally convincing and analogous ones can be cited pertaining to the nervous and osseous tissues) militate, I think, strongly against the assumption of a hereditary morbid dyscrasia as producing either eczema or other tissue-lesions and tendencies. On the contrary, they point distinctly to a local debility as the cause. Thus the integument of a person who has long been the victim of eczema undergoes a certain modification, consisting, as I have said, in a tendency of his tegumentary cells to active hyperplasia and of his blood-vessels to hyperæmia. This state, becoming chronic, is, I am of the opinion, firmly ingrafted on his skin, and may then be perpetuated or handed down without any modification to his or her offspring. Now it may happen that in the latter this tendency is not developed or manifested by an outburst owing to the absence of exciting causes, yet it may exist.

I have seen recently a case which fully proved this to my mind after a careful, unprejudiced examination. A young

man of delicate build, but enjoying perfect health, having a thin, fine integument, who had never had a true eczema in his life, is unable to wear flannel underclothing in winter in consequence of the irritation which such would cause. Putting on recently a pair of woolen gloves, he was compelled to discard their use after a few days' wear, owing to the fact that an eczema localized to the hands began to show itself. I carefully examined the case to determine whether there was any other cause for the attack, and I could find none; in fact, as soon as soft, unirritating gloves were worn no tendency to eczema was to be seen.

Now this young man is the son of a mother enjoying perfect health, but possessing a similar delicate integument, which for many years prior to his birth was more or less covered with eczema. He also has a sister who is afflicted with that affection at the changing of the seasons, she also being otherwise perfectly healthy. Certainly in this young man's case there is indication that an eczema of formidable character would be produced if there was any considerable irritation of the skin; in truth, there is in him a latent predisposition to cutaneous inflammation. The same general features are as often observed in the mucous membranes as in the skin, and instances of them could be cited as analogical evidence, were such necessary. The practical conclusion of the study is, I think, to render very probable the fact of a tissue-debility, which may manifest itself in the individual who possesses it or which may remain latent. It may also be transmitted to the progeny of such a person.

In the present study I have confined myself in the explanation of this morbid tendency to citing an abnormal condition of the cells and of the blood-vessels of the skin, purposely leaving for future study the nervous influence which may be involved in this tissue-debility, as that can be studied more appropriately in connection with the etiology of the eczema of older persons. I may, however, say this here in advance,



that I am of the opinion that this morbid impress of which I have written depends in a measure upon the nervous supply to the skin, and that this condition is manifested by tendencies to inflammation in that structure. I propose at some future day to consider in what way the cells and blood-vessels and nerves are severally implicated.

Let us now consider the relation between eczema in children and other cutaneous affections. This question has not yet received sufficient care toward its solution. Since my attention has prominently been directed to the study of the etiology of eczema I have met with at least twelve cases, of which I have taken notes, of young children, who, having had either the exanthemata or some other acute skin-affection, were soon after more or less covered with an eczematous eruption. I examined all very carefully to find the cause, thinking that perhaps in some a debilitated condition of the system had been induced which had predisposed the patients to tegumentary inflammation. Though this hypothesis was admissible in two or three cases, it failed wholly to account for the rest; consequently I came to look upon this condition as being of a modifying rather than of an exciting nature. I must add that I had in these cases thoroughly eliminated all other causes, and had narrowed the issue down, as to cause and effect, to the previous and present skin-affections. The dermatic sequelæ was most often observed in measles and scarlatina, but in two cases the previous eruption was urticaria, and in one case acute erythema. The last three cases were due to chronic gastric irritation, and were of course primarily of a reflex nature. In another instance an attack of contagious impetigo was regarded as the cause. The point to be settled is whether the previous inflammations of the skin tended to the development of the eczema or whether it was a coincidence. The facts of the cases, as well as certain other analogical evidence which applies accurately, convinced me that there was something more than



a simple accident. I am of the opinion that in consequence of the activity of the first morbid process in the integument a tendency was induced or ingrafted upon it to subsequent inflammation; in other words, that, as in the other instances cited, the cells and blood-vessels and nerves had received a morbid impress, and that the nervous supply was also in some manner impaired. This then would be in reality simply a tissue-debility, yet it might be qualified by other conditions. Thus if there existed from any cause a general condition of ill health or of malnutrition, this latter would undoubtedly greatly modify the case; or again, if the patient inherited an integument prone to inflammation, this also would have its effects. This hypothesis, I think, fully explains these cases, and has the support of very convincing facts. Thus we see very frequently catarrhs of the mucous membranes which follow and were undoubtedly due remotely to previous attacks of the exanthemata. The conditions here are precisely the same. In these specified fevers the skin and mucous membranes are intensely congested and modified in the manner just described, and these sequelæ, which are admitted by every one, are really lesions of tissue-change and debility. While we admit the sequelæ of other tissues and organs, should we deny that the skin, which we know is so highly vascular and so plentifully supplied with nerves, is not liable also to such morbid impress? for in reality the conditions in every instance are similar. Then how common is it in the adult subject to find an active inflammation of a tissue or of an organ which follows and was caused by the predisposing influence of a similar previous attack? Indeed examples in the whole range of pathology may be quoted as supporting this view, which when summed up may thus be stated: *that any inflammation of an organ or tissue, whether simple or specific, induces a tendency to a similar process in the future by ingrafting a peculiar morbid condition upon the cells, blood-vessels, and nerves of the part.* Perhaps it might be thought

that as the exanthemata are specific processes a peculiar condition would be ingrafted upon the integument; but from careful observation I have arrived at the conclusion that the effect is the same upon the integument, whether the first eruption is one of the exanthemata or a simple eruption. The explanation above given covers also cases of eczema following vaccination; but here an important point arises; namely, can an impress which has been ingrafted on one part of the skin modify the whole of that tissue? This question is suggested by the fact that following vaccination the eczema generally begins about or near the arm inoculated, and in contagious impetigo the initial skin-affection, as I will call it for simplicity, is very often locally distributed. My studies in this direction have convinced me that local eruptions may induce a local tendency to eczema confined strictly to these parts, and also a susceptibility which involves the whole tegumentary membrane. But I think that careful, painstaking observation will convince the student of this question, that while a local affection may induce a local tendency, it may also involve a predisposition of all the skin to be affected; but in many instances we find that the susceptibility is greater at the original focus than elsewhere. Still the occurrence of a circumscribed portion of the skin being involved and followed by a tendency of the whole tissue to like change is not unfrequently met with. Thus inflammation limited to the integument, for instance, of the hand may show itself as a result of a previous inflammation; yet with this there may be noticed a tendency to spread, and also that other portions of the integument may appear liable to undergo coincidently inflammatory change. This clinical fact is a very important one, and is capable of varied explanation. For instance, it is thought that the liability to spread is indicative of a systemic condition; indeed that the affection would have remained local had not a dyscrasia existed to aggravate it. The weak point of this argument rests in the fact that

in very many instances a morbid systemic condition can not be determined, and when such, in exceptional cases, is found it is difficult to associate it as a cause to the skin-affection. My observation has taught me, or rather caused me to think, that when a circumscribed area of the skin has once been profoundly altered by an eczematous inflammation the balance of that tissue also becomes liable to the same process, probably in this instance through the impress upon the general nervous supply to the skin, perhaps by sympathetic action.

Now in many of these cases it will be seen that the predisposition is greatest, both in frequency of relapse and in severity of form, at the original focus, and thus remains until the balance of the integument has likewise suffered. This is explained, I think, by the fact that in this area the vessels, cells, and nerves have all been profoundly impressed, while in parts remote the tendency depends upon the nerves alone, they having participated in the process which was once local. I am well aware that this is only a theory, yet I think it offers a more rational explanation in general than is offered by the view of systemic disturbance. Now I do not wish to deny that systemic influences do sometimes predispose to the extension of eruptions, as such upon occasions are observed in practice. What I want to do is to put forward the view that there are in the skin itself inherent causes to this extension without its being affected in any way by the condition of the general economy. As pertaining to the eczema of children, I need not enter further than I have into this question, which requires full elaboration in the study of eczema of older persons. What I have said may be summed up as relevant to our present inquiry as follows: *that eczema, more especially of severe form, localized to one spot, ingrafts a tissue-tendency therein to a subsequent similar attack; and also that this affection of one part of the tegumentary membrane predisposes to a greater or less degree the whole to the same morbid process, which is manifested either by its direct extension from*

*the original focus or by its beginning spontaneously at some point more or less remote from its origin.*

The liability of eczema to spread and become general differs widely in different integuments, owing chiefly to the greater or less predisposition of the tissue. Thus in those who inherit the peculiar tendency to skin-affections which we have studied the predisposition may be expected to show itself by the implication of large areas of skin. Again, normally there exist, as we have seen, integuments more delicate and prone to irritation than others, and in them the eruption would gain greater extent than in those having a skin of coarser texture and less susceptible of irritation. Finally the severity and extent and length of duration of the original local lesion have considerable influence upon the subsequent tendency of the whole integument to be involved.

We are now prepared to consider the influence of local irritations in the production of eczema of young children. It is almost unnecessary to repeat that the integument, owing to its peculiarity of structure and its exposed position, is more liable than other tissues and organs to inflammation. While this fact holds good in the more mature individual, owing to the extreme tenderness of this tissue in infants and children, it is particularly prone to be affected by even slight causes. Now there is a fact, which has been well established in the clinical history of infantile eczema, which points very strongly to its local origin. I refer to the very frequent commencement of the affection about the head. This part of the body for obvious reasons is more liable than others to irritation of all kinds, and it is here that in the vast majority of cases the affection begins. Now we will assume that in some cases general debility may act as a predisposing cause, that in others an inherited tissue-debility is presented, while in still another class previous eruptions, either general or local, have induced a condition of the integument favorable to eczema; but the question now arises, does the affection begin spontaneously?

My observation prompts me to give a negative answer in general to this question. Indeed I think that facts warrant me in saying that in every or nearly every case the affection is primarily due to some irritation, and that its cause is modified by the conditions which I have considered. As I have said, the head is the part upon which eczema begins in the greater number of cases, and I think that the fact of this local limited occurrence being so frequent, if not constant, is very weighty as tending to indicate a primary local cause. If these cases are carefully examined, and if the parents are properly questioned, the fact can in most cases be established.

It is impossible for me to indicate all local causes, but I will speak of several which are quite prolific in the production of eczema. First, I think, in order of frequency is the irritation of soap and water. The extreme cleanliness of many mothers and their frequent use of soap often causes eczema in their children. The last case of this affection seen within a few days clearly proves this point. In consequence of the irritation of soap redness appeared upon the scalp of an infant, which, being still washed, induced an eczema.

In this connection I will refer to a local cause which I have very often found to be the indirect means of producing this skin-affection. Very frequently indeed it will be seen in infants that a quantity of sebaceous matter has formed in patches upon the scalp among the hair. This being very unpleasant to the eyes of cleanly mothers, they use too active means for its removal by soap and water, and they induce an erythematous condition which often ends in eczema. If these tenacious patches were first well rubbed with oil, they could then be removed with more facility and with no bad result. This same condition, due no doubt to increased action of the sebaceous glands, very often among the poorer classes, becomes well marked, owing to want of removal, and by its presence affording a nidus to irritating and dirty substances, even to lice. The result is that eczema follows. Very often

upon the head of a child a furuncle forms; it is improperly treated or neglected, or perhaps poulticed, and from this spot inflammation starts, and an extensive eruption of eczema is produced. In many children whose hair is long pediculi are known to cause the affection. Various other causes act upon the scalp in greater or less extent, and tend to produce a copious eruption. The escape of tears over the cheeks, of irritating secretions from the nose and from the mouth, are frequently the means of beginning an eruption which becomes quite large. In many instances I have traced eczema to the ears as the starting-point, the affection having begun either at the angle between it and the head, where the skin is in contact, or perhaps in the ear itself. I have seen undoubted instances in which rough woolen clothes have caused redness of the skin, which has, owing to the non-removal of the cause and the want of treatment, merged into eczema. When speaking of treatment I shall state again what I think is well worthy of careful attention; namely, the necessity of avoidance of irritating swathing woolen clothes to children. In their anxiety to protect their young from cold, mothers very often take measures which result in harm, as eczema is produced. Indeed in winter much delay in the cure of infantile eczema is to be attributed to this cause. Thus children while under treatment are brought to the clinic enveloped in flannel, which being bound around the neck and face is very irritating to the skin. Of course the cure is delayed by this means, and I have upon many occasions found it necessary to explain to the mothers that while it was necessary to protect their children from the cold, it was of the utmost importance not to retard the cure by unnecessary irritation. I think that this practical point is worth the recital. Apropos of it, I may say that changes of season are productive of eczema, and that cold causes its continuance. Quite often does eczema develop primarily upon the cheeks of young children in consequence of the irritation of cold. Indeed I might go on



naming other causes which are suggested to my mind by facts elicited from cases; yet I think that, having stated the general causes of local irritation, and having cited the few instances, I have said enough to prove that the vast majority of cases of eczema are thus produced.

NEW YORK.

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LACERATION OF THE IRIS, WITH PARTIAL DETACHMENT FROM ITS SUPERIOR AND INFERIOR PERIPHERAL BORDER.\*

BY MARTIN F. COOMES, M. D.

I was called by my friend, Dr. John Brady, to see Mr. B., at three o'clock P. M., on the 7th of April. On inquiry I learned that he had received a blow on the left eye from the cork of an ale-bottle. Pain was very intense for a short time after the accident, so much so as to cause the patient to become faint and sick. On examination I found that the cornea and sclerotica were uninjured; the ocular conjunctiva was somewhat injected, and the anterior chamber filled with blood, which had more the appearance of being arterial than venous. Vision at this time was very much impaired, the patient being scarcely able to distinguish light from darkness. I ordered a solution of the sulphate of atropia, the strength of one grain to the ounce of water, to be dropped into the eye frequently until the pain was relieved, and along with this the application of a cold compress.

I called at nine o'clock that evening, and was much surprised to find that the anterior chamber was almost free from blood, with the exception of a small triangular space, which was situated in the lower and central portion of the chamber, with its base directed downward, and reaching to the periph-

\* Read before the Louisville Academy of Medicine.



eral margin of the iris; while the apex was directed vertically upward, and reached almost to the center of the pupillary space, which was then widely dilated, and presented the appearance of an elliptical instead of a circular opening in the iris, the long diameter of the ellipse being horizontal and the short diameter vertical. Pain was then very slight and vision improved sufficiently to count fingers at the distance of three feet. No ophthalmoscopic examination to-day.

I saw my patient on the evening of the 8th, learned that he had passed a comfortable night and was free from pain, but was a little astonished to find that there had been a slight recurrence of hemorrhage and a limitation of the visual field. The limitation was caused by a fibrinous blood-clot, which was about one line and a fourth in width at the center, and about two lines in width at either end. It extended vertically across the anterior chamber, full out to the peripheral margin of the iris above and below. The clot was as well defined and the outline as perfect as if it had been painted by an artist. I was somewhat puzzled to understand just how it was possible for the outline of the clot to be so perfect; but after its upper portion had been removed by absorption, with the aid of strong oblique illumination I was enabled to see that the iris at its upper margin was detached, with the exception of the pectinal ligament, to about the width of two lines; thus the mystery was solved in my mind, and, I think, to the satisfaction of those who may hear or read the report of this case. My supposition was that there had been a rupture of the pectinal ligament at that point, and the one below as well, sufficient to permit the exudation of a small quantity of blood, and thus cause the outline of the clot to assume so perfect a form. The pupil was still dilated almost to its fullest extent, quite sufficient for me to view the fundus oculi on either side of the blood-clot. An ophthalmoscopic examination showed that the lens, vitreous humor, retina, and choroid were all perfectly normal.

I saw my patient again on the evening of the 9th, and found that the clot was being gradually absorbed. I made another ophthalmoscopic examination, and the eye presented the same condition as on the previous evening. I ordered him to omit the cold applications, continue the solution of atropia, and keep the eye protected from light. Under this plan of treatment he continued to improve daily until the clot was completely absorbed and vision perfectly restored, which was on the eighth day after the injury. The pupil still retains its elliptical form, and the patient's vision to-day equals  $\frac{3}{2}0$ .

LOUISVILLE.

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## PULMONARY ŒDEMA.

BY W. H. BRYANT, M. D.

This is one of the gravest of intercurrent diseases. My attention was first directed to it from its occurrence in cases of pneumonia, and I believe that this complication is more frequent perhaps than all others. So too in cases of pneumonia suddenly fatal I believe that pulmonary œdema is the primary and heart-clot the secondary cause of the result. During an epidemic of cerebro-spinal meningitis which occurred here in the spring of 1874 pulmonary œdema was the cause of death in more than one half of the fatal cases. Why this complication in such disease is not easily answered.

When œdema occurs in pneumonia it is usually within the first few days, rarely later than the fifth; but whether in pneumonia or in other disease, this complication presents uniform symptoms, and therefore its early recognition will present no great difficulty. We have first embarrassed respiration, the breathing is short and quick; there are tracheal *râles*; and in proportion to the difficulty of respiration there

will be more or less profuse perspiration of the neck and head, so that the pillow may be quite wet with it. Coma as profound as in apoplexy or in uræmia will be found if the obstruction to the pulmonary circulation is very great. The pulse is from 120 to 140.

The only thing which may occur in pneumonia and which may be mistaken for œdema is heart-clot; pneumonia ranking next to rheumatism and capillary bronchitis in producing that condition of the blood termed *hyperinosis*, or, as Vogel has it, *inopexia*, a condition which is the most important of all vital causes in determining the formation of *ante-mortem* heart-clot.

I need hardly dwell on the importance of distinguishing between these, œdema and clot, especially since the treatment of these two conditions is so different.

The treatment I have successfully pursued in the œdema of pneumonia is blood-letting. Possibly, should the disease be recognized in its very inception, veratrum viride with dry cups to the chest would suffice for its arrest; but when coma and tracheal *râles* exist, no matter how slight, it seems to me venesection is the only reliable remedy. I have often seen patients lying in deep coma, with half-closed, up-turned eyes, and with tracheal *râles* so loud that they may be heard before entering the house, close their eyes and mouth and breathe naturally before the blood has ceased flowing. They waken up as from a sleep, expectorating large quantities of a frothy serum, and express themselves as greatly relieved; and the physician may feel a just pride in his art when he is thus able to snatch a fellow-being from otherwise inevitable death.

Unfortunately venesection in the œdema of cerebro-spinal meningitis gives no such results as in the œdema of pneumonia, since the cause is so different in the two diseases.

## Reviews.

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**A Study of the Nature and Mechanism of Fever.** By  
HORATIO C. WOOD, M. D. Washington, 1875.

This is the fourth lecture of the Toner Series, which were instituted by the liberal founder "to encourage the discovery of new truths for the advancement of medicine," and is published in the "Smithsonian Miscellaneous Collections." The title is captivating, and the subject is prosecuted in the true philosophical spirit. The author seeks to explain phenomena which have baffled the scrutiny and erudition of all the explorers who have hitherto attempted their explication. In the first part of his lecture we are entirely with him. His demonstration of the following propositions is clear and conclusive:

*"First*—External heat applied to the body of the normal animal so as to elevate the temperature produces derangement of the nerve functions, of circulation, etc., etc., precisely similar to those seen in natural fever; the intensity of the disturbance being directly proportionate to the rise in temperature.

*"Second*—Heat applied locally to the brain or to the heart produces in the functions of the organ those disturbances which are familiar phenomena of fever, the intensity of the disturbance being directly proportionate to the excess of heat in the organ.

*"Third*—The withdrawal of the excess of heat in fever is followed by a relief of the nervous and circulatory disturbances."

The third proposition Dr. Wood had an opportunity to prove by a most interesting case which came under his care, and is thus given:

"Some time since, upon entering my ward in the Philadelphia Hospital, my attention was instantly attracted by the expression

upon the face of a patient. He was a young, temperate Irishman, twenty years of age, and of a vigorous physique, who had passed through a severe attack of inflammatory rheumatism without cardiac complications, and was suffering from a relapse, which first appeared as a subacute inflammation of the knee. I had not seen the man the previous day, but I find in the note-book of Dr. Bruen, my interne, the following: 'Second day of relapse. This morning an acute inflammation of the wrist-joints has set in; the fever is very high; temperature in the axilla  $104^{\circ}$  F. Ordered potassii bicarb. gr. xx every two hours.'

"As we walked to the bed, in reply to a question, 'What ails our rheumatism patient?' Dr. Bruen said, 'Nothing, unless it be pericarditis. When I saw him at 10.30 A.M. there was much less inflammation of the joints than on the preceding morning; and although his temperature was as it had been ( $104^{\circ}$  F.), and, as I thought, a pericardial friction-sound could be heard, yet the man was doing fairly; perfectly rational, with a good pulse.' It was now about half past twelve, and our patient was apparently dying. The pulse was between 160 and 170, exceedingly feeble and thready; the pupils strongly contracted, though not to pin-points; the respirations fifteen per minute, exceedingly irregular, mostly deep, jerking, and interrupted; skin pale and dry; consciousness completely lost, violent shaking and shouting in the ear only eliciting a few grunts; temperature in the axilla  $108\frac{1}{2}^{\circ}$  F.; the wrists pale, and no signs of pain elicited by violently moving them. On ausculting the heart I could find no murmur. The first sound was very feeble, somewhat prolonged, and the second sharply accentuated.

"Coming to the conclusion that our patient was dying of heat, we determined to cool him at all hazards, and, as the surest and most rapid means, to employ the cold bath."

All the formidable symptoms began immediately to abate. The patient was not in the bath more than a minute and a half before he began to exhibit distinct signs of returning consciousness, and in three minutes was striving to get out of the bath. His relief was clearly due to the abstraction of heat from his body. If his drowsiness had been caused by congestion of the brain, the cold bath, as justly remarked by Dr. Wood, would have increased the trouble by driving the blood from the surface to all interior parts.

All this is satisfactory; but when our author goes on to prove that there is an "inhibitory chemical center" in the brain by which the temperature of animals is regulated we confess our failure to recognize the demonstration. The evidence of these "inhibitory chemical nerves" seems to us incomplete. That the nerves are concerned in the evolution of vital heat is indeed unquestionable; but that they affect temperature through chemical changes in every case is equally beyond doubt. The nerves can only raise or depress the heat of the body by accelerating or retarding those changes; but great rises of temperature take place quite independently of nervous influence, as is frequently remarked in the human body soon after death. In diseases characterized by a high temperature either the chemical processes which evolve heat in a healthy condition are more active, or else the heat fails to escape from the body as it does in health. The fever marks the activity of those processes, and is in proportion to it. That in some way the nervous system is concerned in the change there can not be a doubt.

Meantime the fact so clearly brought out by Dr. Wood, that the morbid effects of fever may all be produced by artificial heat, and are relieved at once by cooling the body, is of the greatest practical significance. It points to the rational practice in the morbid condition of which fever is the leading feature. We get clear of the dangerous element in the case when we lower the abnormal temperature.

We thank Dr. Wood for this attempt of his to throw light upon the mechanism of fever. If he has not answered the question conclusively, "Is fever a hæmic disorder or is it a neurosis?" he has produced an exceedingly ingenious essay, which will stimulate inquiry in this direction. It is well that he is calling the attention of medical men back to the nervous system, seeing how prone the professional mind has been for a long time to find all sources of disease in the blood.



**Syphilitic Lesions of the Osseous System in Infants and Young Children.** By R. W. TAYLOR, M. D., Surgeon to the New York Dispensary, Department of Venereal and Skin-diseases; Physician to Charity Hospital, New York. New York: William Wood & Co. 1875.

This work has the charm of originality. It is composed not of the observations of others in a new dress and under a modified arrangement, but of materials drawn by the author directly from the book of nature. When his attention was first attracted to the subject, he says in his preface, the lesions of which he treats were only casually alluded to by a few writers on the venereal disease. Confounded with scrofulous affections, they were unskillfully and unsuccessfully treated, and accidents resulting from the syphilitic taint were regarded as arising from simple causes. If then the work before us supplies the knowledge by which a correct diagnosis may be attained in these obscure cases, no one will doubt that the author has made a most valuable contribution to pathology and practical medicine.

We have no hesitation in declaring our belief that Dr. Taylor has produced a most valuable monograph on this subject, and that his work will be found to embrace matter of practical as well as scientific interest not to be found in any other. He gives the history of twelve cases observed by him throughout their progress, and presents a clinical account of the lesions, for a knowledge of which we have hitherto been obliged to look to the pathological anatomist. Among his cases are two in which a separation of the epiphyses from the diaphyses took place, the subjects surviving, and affording the rare opportunity of watching the course of the lesion to its ultimate results. These lesions, Dr. Taylor is convinced, result not only from congenital but also from an acquired syphilis, and may supervene at any period during the growth and development of the bony skeleton.



As to preventive treatment in the mother, we are glad to find that our author has full confidence in mercury. In like manner he recommends mercury, combined with the iodide of potassium, for the child, holding medication through the mother to be wholly inefficacious. While taking medicine the child is to be nourished by its mother's milk.

It is gratifying to meet any where with a work on medicine so original, so complete, so practical as the one before us, but it is doubly so to recognize in it the work of an American physician. We are very sure that it will be hailed by the profession every where as one of those installments to medical science which are made only at long intervals and by the most profound and accurate observers.

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**An Address delivered on the occasion of the Celebration of the Centennial of Chemistry.** By BENJAMIN SILLIMAN, of Yale College.

This address was delivered by Prof. Silliman at Northumberland, Pa., on the 1st of last August, where the chemists of America had met to celebrate the hundredth anniversary of the discovery of oxygen by Priestley. It recounts faithfully the events in the progress of chemistry in our country during the century, and shows that in the wonderful development of the science during the period American chemists have borne an honorable part. The great names associated with chemistry on our continent are given in connection with their labors, and the history is one which will afford pleasure to all who are interested in science. Prof. Silliman has done good service to the fame of his country by vindicating the claims of Americans to some discoveries which foreigners have claimed. He establishes beyond all possibility of cavil the title of Prof. Hare to the discovery of the oxy-hydrogen blow-pipe. As a whole, the history has been prepared with

great industry and care, and the account of the labors of our chemists will be read with pleasurable emotions by every American. A French writer declared a few years ago that "*la chimie est une science française.*" All honor to France for her contributions to science. With Lavoisier it certainly first assumed a scientific cast and form. Let this be conceded; still Americans have a right to claim that they have done something for its advancement during the century.

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**A Sketch of the Early History of Practical Anatomy.**

By WM. W. KEEN, M. D., Lecturer on Anatomy and Operative Surgery in the Philadelphia School of Anatomy.

**The History of the Philadelphia School of Anatomy and its Relations to Medical Teaching.** By the same.

We thank Dr. Keen for these very interesting lectures, and we are sure every one who reads them will be equally grateful.

The first embodies many interesting facts, the very collection of which involved great research, relating to the history of dissection, and the author has woven them together both clearly and gracefully.

The second tells how the Philadelphia School of Anatomy commenced, what has been its progress, who its teachers, and who the celebrated of its pupils. To all who have been medical students in Philadelphia within the last half century this lecture will prove peculiarly interesting, while many of its facts may prove of value in the preparation of a larger history in some coming age. Dr. Keen has erected a monument to the memory of his beloved school which will not soon perish.

T. P.

## Clinic of the Month.

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SPONTANEOUS COMPLETE INVERSION OF THE UTERUS.—The *Annales de Gynécologie* contains a report of a case of this character which recently occurred at *La Charité*, Paris. The subject was a primipara, first and second stages of labor normal. The nurse left the patient to render attention to the child, having made no traction upon the cord; and not more than ten minutes after delivery, upon returning to her bedside, she found her in partial syncope, having lost a large quantity of blood, and a voluminous mass projecting from the vulva. The physician, called immediately, found between the patient's thighs an ovoid mass, the summit of which was formed by the placenta; this was detached as to its left half, but the right was continuous with the tumor. The placenta was detached, and the fundus being held in the palm of the hand, the body embraced by the fingers, gentle and steady efforts were made to replace the uterus, which after some time were successful in restoring the prolapsed uterus into the vagina. M. Gueniot, being called, completed the reduction by the fingers of one hand folded together like a cone, and covered with a double compress, pressing against the fundus, while the other hand was applied to the hypogastrium. The patient entirely recovered, though her convalescence was interrupted by abdominal swelling, delirium, diarrhea, etc.

MM. Homolle and Martin, who report this case with many more details than we have given in the translation, remark that it is interesting in several respects. Prompt intervention rendered reduction easy before complete retraction of the neck. All authors—Courty, Barnes, Cazeaux, Depaul,

Chevreul, and many others — agree as to the necessity for attempting immediate reduction in inversion of the uterus. Barnes and Chevreul advise in case of adherence of the placenta returning the entire mass, and then wait the spontaneous expulsion of the placenta. Courty, on the other hand, believes the placenta ought to be removed first, no matter what the adhesions, before attempting reduction.

In this case there was an entire absence of the acute pain which several authors signalize as accompanying the energetic contraction, which according to them determines the inversion. In reference to the etiology in this case, there had been no traction upon the cord, which is different from what has occurred in many other cases.

NEW MATERIAL FOR FIXED DRESSINGS.—Dr. R. J. Levis, of Philadelphia, recommends glue and oxide of zinc as the one dressing which fulfills all requirements; being cleanly in its application, drying with sufficient rapidity, removable without difficulty, exceedingly light, and withal very cheap. The material is ordinary glue, with which oxide of zinc has been incorporated at the time of using it, in order to cause it to harden rapidly. Several pieces of flannel, old blankets or worn-out underclothing answering the purpose admirably, are selected and cut the requisite size. One of these is laid around the limb, and the two edges are tightly stitched together along the anterior surface, allowing the edge to project above the seam; then the melted glue, with oxide of zinc, is painted upon this with a brush. The dressing may be strengthened by an additional layer of flannel or blanket saturated with the glue and oxide of zinc, and made to adhere to the underlying layer. A third or even a fourth layer may be thus applied, if it is deemed necessary, and the limb supported until the dressing dries, which requires from four to eight hours. The stitches of the seam on the front of the limb having been cut with scissors, the edges of this

elastic case are sprung apart, and the dressing removed. The edges are then trimmed smooth and a number of eyelets inserted, in order that the case may be laced like a shoe, and the degree of pressure regulated.

This fixed fracture-apparatus is exceedingly light, is made from materials almost every where obtainable, and is much cheaper than the silicate dressing. There are at all times pieces of waste flannel or cloth about a large hospital which can be appropriated, while the glue and zinc could probably be supplied at a very low price per pound, a quantity sufficient for the manufacture of many such splints. Another advantage is its elasticity, which permits its removal without endangering the splint, for it can be pulled apart, and immediately springs into place around the limb to which it has been molded. By a little care and dexterity in stitching on the layers of flannel, the surgeon can readily shape the dressing so that both the leg and the foot are completely encased.

OPERATION FOR THE DESTRUCTION OF VARICOSE VEINS.—Mr. Charles Steele, of Bristol, describes (*British Med. Jour.*) the following method he employs for this purpose. In an ordinary case his plan is “to isolate the main vein or veins below the knee, compress above to define the vessel, make an incision at right angles to its axis, dissect out the vein without picking it, seize firmly with torsion-forceps, and drag out as much as possible, which seldom amounts to an inch, and cut off the piece as close to the skin as possible at both ends. I pass a probe through the removed piece, to be sure that the entire caliber is secured. The vein in the leg is emptied of blood by pressure. If it do not refill, I am satisfied; if it do, I remove portions which are prominent below. A horse-hair suture in the wound, a compress of cotton-wool, and firm bandage complete the operation. After trying several dressings, I prefer the simple cotton-wool, as it soaks

up blood and forms a good protection, which drops off like a scab, if healing by the first intention occur, and comes off easily, from becoming moist, if suppuration take place."

JABORANDI.—The indications for the employment of this drug can not yet be fully stated, according to Prof. Gubler, of Paris, but some of them are clear enough; namely, the anasarca and œdema met with in rheumatism, albuminuria, and diseases of the heart. Under its use M. Gubler has found serous effusions diminish, and by it he has cut short attacks of influenza. One of the most remarkable results which he has observed has been its effects on chronic bronchitis and emphysema with asthmatic paroxysms. In five or six cases the amelioration has been instantaneous. He met with the first of these in 1873, in a man to whom a cup of tepid infusion had been administered during an excessive paroxysm of asthma, and who fifteen minutes afterward began sweating and expectorating. Almost immediately after this his respiration became quite easy, the patient declaring that his malady had been taken from him as with the hand. The jaborandi may also be advantageously given in subacute rheumatism, as also as a salivary revulsive, like calomel. (*American Journal of Medical Sciences.*)

MEDICINES APPLIED TO THE UTERINE CANAL AND CAVITY BY MEANS OF CAPSULES.—Dr. E. P. Sale, of Aberdeen, Miss., now uses gelatine capsules as a vehicle for conveying medicines to the uterine canal, introducing them as follows: The patient being in the recumbent position, the speculum introduced, the uterine canal having been previously dilated and cleansed, the capsule is introduced either below or above the os internum by means of forceps; the patient retains her position for half an hour for the capsule to dissolve, or, if circumstances prevent her being quiet, the uterine mouth can be plugged with cotton to retain the capsule, or a pledget

of oiled cotton with a string attached can be stuffed high up in the vagina, which can be removed by the patient at will. The capsules used are the elongated No. 1 of Messrs. Plantin & Son. By this method nearly all medicines embraced in gynecological therapeutics can be applied; such as nit. silver, chromic acid, etc. All of these can be mitigated to suit the case by innocuous agents, as nit. pot., pulv. acaciæ, starch, lycopodium, etc. (*Ibid.*)

PREVENTION OF PITTING IN SMALL-POX.—Dr. Ward has found the application of honey, painted on with a camel's-hair brush twice or thrice a day, to prevent pitting in small-pox. He also recommends it for cracks in the skin from frost. (Practitioner.)

THE LOCAL TREATMENT OF LICHEN URTICATUS.—This skin-disease, specially affecting children, is characterized by wheals, papules, and severe itching, worse at night, but independent of any discoverable parasite. It is treated by Dr. Mackey with an ointment consisting of equal parts of calomel ointment and extract of belladonna, or with one made according to the following formula:

R. Storacis, . . . . . ʒj;  
Ceræ flavæ, . . . . . gr. cxx;  
Olei olivæ, . . . . . fl. ʒ ss.  
Misce secundum artem. (*Ibid.*)

DIGITALIS AND BROMIDE OF POTASSIUM IN DELIRIUM TREMENS.—Dr. Crichton has found the combination of digitalis and bromide of potassium, recommended by Dr. Milner Fothergill (Practitioner, vol. xiii, p. 407) very efficacious in a very aggravated case of delirium tremens, where the pulse was so rapid and feeble that it could not be counted, all nourishment was refused, insomnia was persistent, and agitation constant. The dose given was half a drachm of bromide of potassium



with the same quantity of tincture of digitalis every two hours, and milk and beef-tea were given at frequent intervals. (*Ibid.*)

ADMINISTRATION OF CASTOR-OIL.—M. Potain recommends as the best method of concealing the unpleasant flavor of castor-oil to squeeze half an orange into a glass and pour the oil upon it; then, avoiding all disturbance of the liquids, to squeeze the juice from the other half of the orange carefully over it. The oil thus inclosed between two layers of orange-juice can be swallowed without the least perception of its flavor. (*Ibid.*)

TREATMENT OF AMMONIACAL CYSTITIS BY BENZOIC ACID.—M. Gosselin (*Gaz. des Hôp.*) states that the ammoniacal condition of the urine plays a large part in the production of accidents which occur after operations on the urinary passages, and that there is a great advantage in lessening it. Benzoic acid and the balsams which contain it, and probably also other vegetable products—such as salicin and cinnamic acid, etc.—may conduce to this result. The product, hippuric acid, acts in several ways: 1. By forming the hippurate of ammonia, which is less toxic than the carbonate of ammonia; 2. By retarding the decomposition of the urine, and consequently the production of carbonate of ammonia; 3. By preventing the formation of phosphatic deposits of an insoluble nature, which are a cause of cystitis, and may cause calculus in the bladder. The administration of benzoic acid should be advised in persons attacked with ammoniaco-purulent cystitis, and particularly if they are to be operated on for disease of the urinary passages. (The Doctor.)

TREATMENT OF VAGINAL DISCHARGE.—Dr. Guibout (*Gaz. des Hôpitaux*) states that these discharges may be due to an excessive flow of the natural secretions of the parts, such as the vulvo-vaginal liquid, vaginal mucus, etc. Morbid secretions from the vagina are purulent, yellow, or greenish when

due to inflammation, while those from the uterus are glutinous. Ordinary leucorrhœa is but an exaggeration of the natural secretion, and is often due to ill health.

Dr. Guibout declares injections useless for these vaginal discharges. He employs the tampon, and generally cures his patients in from eight to ten days. Various astringent solutions—nitrate of silver, sulphate of zinc, perchloride of iron, and alum—are often employed; but these he has found to be so inconvenient for many reasons that he has completely put them aside for a solution of tannin, in which he soaks lint. A tampon thus made is inserted every day, and allowed to remain twenty-four hours. The patient is required to keep in the horizontal position, and to move as little as possible. On the removal of a tampon detersive injections are made before another is inserted. Dr. Guibout attributes benefit to the plugs from their acting as foreign bodies, modifying the vitality of diseased surfaces and keeping them apart. The astringent aids this.

UNUNITED FRACTURE TREATED BY TRANSPLANTATION OF BONE.—The *Aerztliches Intelligenz-Blatt*, February, 1875, contains a clinical lecture by Prof. Nussbaum, of Munich, on ununited fracture, its pathology and methods of treatment, and particularly on the treatment by the transplantation of bone, in complicated gunshot fractures, resulting in an open false joint, with great loss of bone-substance and necrosis, where the cartilage incrustated extremities are merely bound together by a long, thin, tendinous band. He has had but one case in which he has employed the method, but with such success as to afford great encouragement to further attempts in the same direction.

A lieutenant, twenty-four years old, received a very severe gunshot wound in the right fore arm. The ulna was mashed in the middle, the splinters of bone had necrosed, the periosteum had been destroyed, and subsequent cicatrization had

resulted in a false joint, having about two inches and a half of open wound. The two approximating ends of the fractured bone were united by means of a thin fibrous cord. Although the radius was intact, the functions of the bone were so limited and its abnormal motion so exaggerated that the patient was invalided. Four years after, the patient being chloroformed, the false joint was exposed. Both ends of the fractured bone were thin, covered with a pointed cartilaginous process, and slightly united by means of a weak, tendinous, false ligament. The pointed cartilaginous extremities and the thin false ligament, being rather in the way than useful, were cut off with strong scissors. Next, the upper surface of the proximal end of the ulna was half sawn through about two inches and a half from its extremity, and with a sharp-cutting chisel this upper piece of the ulna, with its periosteum, was split off parallel with its upper surface, yet so that the periosteum of the pointed extremity and of the under surface were not both cut through; thus the detached portion of bone had still a slight nutrient bridge derived from the periosteal covering. Finally the portion of bone thus detached was so deposited in the gap that its internal upper surface now became external, the under internal, and the outer surface became the upper one. Had the transplanted portion been turned downward so that the now upper surface had become the under, the periosteal bridge remaining on the under surface must have been much more dragged upon and torn, and it would have been probable that the blood-communication through the connecting periosteal slip might have been entirely cut off.

In the gap in which the transplanted portion of bone had been placed a tolerably deep incision had been previously made into the indurated soft parts, to promote some inflammatory action in the neighborhood and to favor the adhesion of the introduced portion of bone. The wound was dressed with carbolized dressing and closed with seven sutures, and subsequently inclosed in a gypsum bandage furnished with a

trap-door. The operation was so successful that five months after the patient was returned to duty.

Prof. Nussbaum makes the following remarks on the two great mishaps after fracture, viz., healing bent or with considerable shortening. Supposing a case is met with within six months, the badly-united fracture should be simply broken up again under chloroform, as before the definitive callus is formed a refracture is neither difficult nor dangerous.

A linen cloth should be laid on the edge of a table, and the fracture to be rebroken brought quite to the margin. A strong pressure downward readily breaks the provisional callus, and it is best broken in the direction corresponding with the faulty curve, and should be commenced by extension, for which purpose an extension-bandage is most serviceable. Considerable risk is run in refracture, during this stretching, of rupturing some artery adherent to the callus, since the process is never effected slowly but always with a powerful jerk; but if the callus be broken up by bending inward, the necessary amount of stretching can be conducted slowly and surely. A good position having been obtained, the new fracture can be treated as a simple one.

If six or seven months have passed and the definitive callus has become of ivory hardness and stronger than the sound bone, should any attempt be made at refracture, it would remain intact, and the resulting fracture of the normal bone would render the condition worse than before. Under these circumstances only operation is of use.

Langenbeck employs two processes in the subsequent operative procedure on the bones. After having made a small incision in the skin he first bores through the callus at the angle. He then enters a small, fine key-hole saw into the hole thus bored, and cuts through the bent bones right and left to such an extent that merely a thin bridge of the cortex of these bones remains intact. The wound is then carefully cleansed. After granulation has taken place and

the integument has healed over he undertakes as the second part of the operation the fracture of the remaining thin cortex, and treats it, by means of a gypsum bandage, as a simple fracture of the bone. The idea is admirable. The object of this partial sawing is that the mass of definitive callus, which has become as hard as ivory and could itself not be broken up, is readily ruptured when it has been about three parts sawn through, and the fracture can be effected at the "place of election." It is a matter of fact that the wound effected by boring and sawing portions of the operation produce such inflammatory reaction that the remaining lamellæ thereby become soft and elastic, and so the rest of the operation is rather a bending than a fracture. The most important advantage, however, of Langenbeck's operation consists in this, that when there is a wound there is no fracture, and at the time when one has to be made and treated there is no open wound.

American surgeons reduce the bones to be broken later on simply by drilling five or six holes through them. Szymanowsky saws a wedge-shaped piece out, three parts of the thickness of which he removes, and after the healing of the soft parts breaks through the remaining portion. Professor Nussbaum's plan is to avoid the sawdust and *débris* arising from the drilling and sawing operations by using a fine, sharp cabinet-maker's chisel. He chisels through about three quarters of the thickness of the bone, and then withdraws the chisel, allows the wound to heal, and afterward breaks through the remaining portion. (Canada Medical and Surgical Journal.)

ACTION OF HYPODERMIC MORPHIA.—One thousand experiments were made upon himself by M. Chouppe. He found that morphine injected in a painful spot develops its anæsthetic action in two to two and a half minutes earlier than when injected at a distance. Pain ceased sooner after direct

than after general application. A direct proof of the local action of the drug was derived from the employment of concentrated solutions. While an injection of distilled water and a weak solution of morphia ( $\frac{1}{150}$ ) caused sharp pains at the point of insertion, strong solutions ( $\frac{1}{50}$  or  $\frac{1}{30}$ ) cause no perceptible pains. Therefore it is better to inject at the seat of pain and to use concentrated solutions. (The Doctor.)

RETROVERSION. — Dr. Aveling tells (Obstetrical Journal) the following: The postural treatment of retroversion consists in lying or reclining upon the sides or, still better, upon the face. Prostration also is an admirable attitude. A remarkable anecdote in support of this is told of a lady suffering from retroversion, who made her complaint the subject of prayer, and was surprised to find it answered only while she was upon her knees. All pain ceased during the devotional act; that is, when she unconsciously adopted the proper postural treatment. (*Ibid.*)

TREATMENT OF DIPHTHERIA AND SCARLET FEVER. — Dr. G. Mayer (*Fahrh. f. Kinderk.*) directs even in children under one year small pieces of ice to be put frequently into the mouth, followed, if possible, every minute or two by a teaspoonful of iced water. In severe cases the external use of cold, by means of an ice-bag applied round the throat, is very useful. The author has found that by this mode of treatment the fever soon diminishes, and the diphtheritic membrane is detached and expectorated. It is only in exceptional cases that the disease extends nevertheless to the larynx. But in one case the author was obliged, in order to reduce the temperature, to resort to cool baths. The latter he also found very useful in scarlet fever. Whenever the temperature exceeds  $102^{\circ}$  in scarlet fever the patient is to be placed for ten minutes in a bath of a temperature varying from  $93^{\circ}$  to  $73^{\circ}$ , according to the intensity of the fever. The

effect of these baths in reducing the temperature lasts for two or three hours. (Canada Medical Record.)

TREATMENT OF GONORRHEA.—Dr. Haberkorn, in the *Berl. Klin. Wochenschrift*, writes that injections of permanganate of potassa, carbolic acid, sulphate of zinc, and other remedies have all proved more or less insufficient in the treatment of gonorrhea. After repeated experiments he has found the sulphate of quinine to be a far superior remedy, being prompt in its action and nearly painless. He directs a tea-spoonful of the following mixture to be injected three times a day, and retained for some time in the urethra:

R. Quiniæ sulphat., . . gr. xv;  
 Acid sulph. dil., . . ℥j;  
 Glycerinæ, . . . fl. ʒ vj;  
 Aquæ, . . . fl. ʒ ij.

After three days a great improvement took place in all his cases.

LINIMENT FOR SCABIES.—Dr. Clemens gives the following formula: take of arsenious acid one grain, carbonate of potash fifteen grains, spirit of soap three drachms, spring water three ounces; the liniment to be rubbed twice daily on the part affected. It does not harm the youngest child. (Practitioner.)



## Notes and Queries.

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THE AMERICAN MEDICAL ASSOCIATION.—The American Medical Association met in Library Hall in this city, at eleven o'clock, Tuesday, the 4th of May. The president, Dr. W. K. Bowling, of Tennessee, having been introduced by Dr. J. M. Toner, of Washington City, the deliberations were prefaced by a prayer offered by Elder Lamar, of the Walnut-street Christian Church. The meeting being duly called to order, Dr. E. Richardson, chairman of the Committee of Arrangements, welcomed the association in an appropriate address. Dr. Bottsford, president of the Canadian Medical Association, was introduced by Dr. N. S. Davis, and invited to take a seat on the platform. The address of Dr. Bowling, which we give elsewhere, then followed. In the afternoon the various sections met and heard papers read on the practice of medicine, surgery, obstetrics, and hygiene, which gave rise to much discussion. They will be reproduced in the volume of Transactions.

Wednesday morning, the second day of the meeting, Dr. Gross read a paper, entitled "One of the Lost Arts." It was an argument for the revival of blood-letting. This was followed by a report by Dr. Flint on the progress of medicine. Both these papers were referred to the Committee of Publication.

Dr. S. B. Todd, of Lexington, announced that Dr. John D. Jackson, of Lexington, chairman of the Prize-essay Committee, was lying ill at his hotel, and moved a resolution expressive of the sincere regret of the association that he is unable to participate in its deliberations, and tendering

him the sympathy and condolence of the body at large. The resolution was submitted in writing, and unanimously passed.

At the meeting on Thursday morning Dr. Flint offered a similar resolution in regard to Dr. Lewis Rogers. He said:

*"Mr. President—*During the present meeting of the American Medical Association we have missed the familiar face and the active co-operation of one of the most distinguished members of our profession in the city of Louisville—Dr. Lewis Rogers. He is ill, and has been so for some months. Under these circumstances it seems proper that the association should express a tribute of respect to and sympathy for our worthy colleague. I therefore offer the following resolution:

*"Resolved,* That the American Medical Association tender to Dr. Lewis Rogers regret for the illness that has deprived the association of his presence and aid in the proceedings, and our hope that the profession and the community may again be blessed by his return to the enjoyment of health."

The resolution was adopted with an earnest unanimity.

Dr. J. Marion Sims, of New York, obtained the floor, the announcement of his name evoking loud applause. He arose to submit a report from the special committee appointed to devise plans for the establishment of the McDowell Memorial Fund. He spoke earnestly in behalf of the report, urging the association to be mindful of the obligations that the medical profession and humanity in general were under to the great "Father of Ovariectomy." The following is the report:

*"Whereas,* It is universally acknowledged that the late Ephraim McDowell, of Kentucky, was the originator of the operation of ovariectomy; and whereas, we believe that proper measures should be instituted to commemorate this great achievement and do appropriate honor to its author; therefore

*"Resolved,* That this association recommend to each of its members and to the profession generally to contribute annually such sums as they may think proper, until the amount of ten thousand dollars shall be accumulated, which shall be known as the McDowell Memorial Fund, the interest of which shall be devoted to the

payment of prizes for the best essays relating to the diseases and surgery of the ovaries.

*"Resolved,* That this fund shall be invested by trustees, to be appointed by the association, and subject to such regulations as it may desire.

*"Resolved,* That the association shall elect a board of three trustees, whose duty it shall be to carry out the object of these resolutions, and whose term of office shall continue five years.

*"Resolved,* That this association will leave to the state of Kentucky the grateful privilege of providing a local memorial to the memory of Dr. McDowell."

The Judicial Council reported adversely to the decision of the Committee on Credentials in the case of the College of Physicians and Surgeons of Louisville. The committee had declared Dr. E. S. Gaillard and others entitled to seats as delegates from the college. The council submitted the following resolution, which was adopted:

*"Resolved,* That the list of delegates appointed by the society known as the College of Physicians and Surgeons of Louisville, Ky., consists of Drs. Turner Anderson, Wm. Bailey, D. W. Yandell, Lewis Rogers, and J. W. Holland as the lawful and proper delegates from that society; and that the Committee of Arrangements should correct the registry of members for this meeting of the association in conformity thereto."

The delegates from the Louisville Academy of Medicine were not admitted, "simply," as the council expressed it in their resolution, "because it is believed that the association had already received from the State Medical Society of Kentucky, and the local societies in Louisville having a prior active existence, the full number of delegates to which the profession of Louisville is entitled." This was in conformity with the decision, previously made, of the Committee on Credentials.

A paper was read by Dr. E. M. Moore, of Rochester, N. Y., on transfusion of blood, which was referred to the Committee of Publication.

The afternoon was occupied by the sections, as on the previous days, in hearing and discussing papers on a great variety of subjects. The following resolutions, offered by Dr. Toner, on the rank of the medical department in the army were adopted:

*“Resolved*, That this association learns with regret that no action was taken by the last Congress upon its recommendation in behalf of the medical department of the United States army, and that we respectfully renew our petition that Congress will enact such a bill for the benefit of the medical department of the army as will secure to its officers that share of rank and promotion to which we consider they are entitled, and which should be at least fully equal to that enjoyed by any other staff corps or by the medical corps of the army.

*“Resolved*, That a committee of five be appointed to call the attention of Congress to this subject and the petitions which were forwarded to the last Congress by the physicians of the United States.”

The election of officers was the most interesting business of the fourth day. Dr. Atkinson has held the office of permanent secretary of the association for fifteen years, and is pretty sure to hold it as long as he is willing to discharge its duties, for his equal for the labors of such an office could hardly be found in the profession of our country.

Dr. Wood, from the Committee on Nominations, reported the following gentlemen to fill the various offices of the convention:

*President*—J. Marion Sims, of New York; *First Vice-president*—J. D. Jackson, of Kentucky; *Second Vice-president*—Samuel Lilly, of New Jersey; *Third Vice-president*—N. Pinckney, United States Navy; *Fourth Vice-president*—S. D. Seeley, of Alabama; *Treasurer*—Caspar Wister, of Pennsylvania; *Librarian*—William Lee, of District of Columbia; *Committee on Library*—Johnson Eliot, of District of Columbia; *Assistant Secretary*—Robt. J. Dunglison, of Pennsylvania; *Committee on Arrangements*—Wm. Pepper (chairman), Frank Maury, Albert Fricke, A. Hewson, S. W. Gross, Wm. Goodsell, and T. M. Drysdale; *Committee on Publication*—F. G.

Smith, T. M. Drysdale, Albert Fricke, and William B. Atkinson, of Philadelphia.

The report was unanimously adopted.

Dr. L. P. Yandell, sr., as chairman of the Committee on Prize Essays, reported that the committee had received several papers carefully written and marked by various degrees of merit; but that, after as careful an examination as the committee could make, they were not prepared to recommend any as worthy of the prize offered by the association. One of the papers submitted to the committee was a work of vast dimensions; it makes four volumes, and an aggregate of more than twelve hundred pages. The committee found it utterly impossible in the time at their disposal to look through this elaborate paper. It treats of "Excision of the Larger Joints," and the committee would recommend that it be submitted to a committee of experts, to report upon its merits at the next meeting of the association.

Dr. N. S. Davis moved the following:

*"Resolved, That in the death of the late Dr. Jas. McNaughton, of Albany, N. Y., we recognize the loss of one of the earliest, oldest, and most distinguished members of this association; one who for more than half a century had been a noble example of the upright citizen, the untiring physician, the enthusiastic teacher, and the true Christian gentleman."*

Dr. Bowditch, of Massachusetts, prefaced the resolutions of thanks to the citizens of Louisville which he offered by some very happy remarks. He said:

"This is the first time that I have been in the old Kentucky state, a state for which I have ever entertained the highest admiration. I have known and been connected with many of her great men, politically and professionally, and have consequently been led to think that it was a state filled with great men. I had heard of the hospitality of Kentucky, but I was not prepared to realize the overwhelming nature of the term as understood in the state itself. I came also with the desire of meeting my professional brethren from the South, and wanted to assure them that, however

much they had suffered, we also had suffered, and to offer them the right hand of fellowship. I think the record of the association will prove one of the strongest bonds in the future preservation of the Union. I have sat down with southern men and enjoyed the relation of their experiences upon the fields of battle. The dead of both sections should be held alike sacred, and the time will come when we shall decorate the graves of both Confederate and Federal soldiers. I should be delighted to stand by the grave of Stonewall Jackson and throw a chaplet upon it.

“For these reasons I am rejoiced to be here, to find my anticipations far more than realized. I sincerely thank the physicians of Louisville that they have kept true to their resolution of not allowing the use of wine during the meeting of the association. If any men should set an example for sobriety, they should be the physicians. I admit, however, that I am myself in the habit of taking a glass or two of sherry wine daily, but such was not used intemperately.

“One of the most charming things connected with the association is the presence of woman. This always tends to harmonize matters, for when men get together they are apt to say things they would not say before their wives. Their influence here has been for good. This, with the absence of wine, has furnished a stimulus that is more praiseworthy and beneficial than any that could be produced by artificial means.”

Dr. Baldwin, of Alabama, followed Dr. Bowditch in some thrilling remarks, of which the *Courier-Journal* says, “The gentleman’s effort was characterized by a tropical fervency of feeling, which worked up the emotional capacity of every one present, and when he took his seat the building resounded with an outburst of applause, the intensity of which gave evidence that a responsive cord had been struck which would pulsate upon the social atmosphere from the savannahs of the South to the frozen lakes of the North, and from the rock-ribbed coast of Maine to the strands of the Golden Gate.”

Dr. Davis, of Chicago, and Dr. Singleton, of Kentucky, continued in the same patriotic and happy strain. We again quote from the *Courier-Journal* as follows: “This short address was succeeded by another from Dr. Davis, of Chicago,



whose eloquence was as buoyant as ozone and as exhilarating as the frosts of his own northern home. While he respected and reciprocated the expressions of good feeling, come from whatever section it might, he could not find it in his heart to locate or bound such a sentiment. He knew no North, South, East, or West, but only his country; and whomsoever he loved he loved not as a resident of any particular section, but as a citizen of his country, as a fellow-countryman."

At the close of Dr. Singleton's brief address a call was made for a speech from Dr. Gross, who came forward on the platform, where he had been sitting, and said:

*"Mr. President and Gentlemen—*If I were gifted with the eloquence characteristic of the gentlemen who have just preceded me, I should indulge in a few remarks. As it is, I can only reiterate the sentiments that have been so beautifully expressed."

He then essayed to speak of his experience in Louisville, but the flood of tender recollections drowned his powers of speech, and he was forced to retire "amid the echoes of broken sentences, faltering words, and the throes of overwhelming emotion." "This episode," says the *Courier-Journal*, from which we have just quoted, "more eloquent than the studied contrivances of speech, melted every heart present, and many an eye unaccustomed to weeping filled with involuntary tears."

The round of speeches was concluded by a representative from the Lone-star State, who stated that in Texas sectional feeling had given place to love of the true fraternal ring, and that the graves of both the Federal and Confederate dead were annually strewn with the choicest flowers, and that the tears shed and grief manifested on such an occasion partook of mutual feeling. He concluded by indorsing the sentiments which had been uttered, and by issuing an invitation to all his medical brethren to come and partake of the hospitalities of his free-hearted fellow-citizens.

After some resolutions complimentary to the ladies of Ken-



tucky, and votes of thanks to citizens and railroads, President Bowling adjourned the association in the following address:

*"Gentlemen—*Before the adjournment of the twenty-sixth meeting of the American Medical Association we may be permitted to congratulate each other upon the general good feeling and perfect harmony that must make it memorable. The cherished members of our calling have graced this meeting with their presence and lavished the wealth of their ripe experience upon it, and the great city of the meeting literally overwhelmed us with a hospitality whose abundance was only equaled by its elegance. We have seen for ourselves at this great commercial capital goodly specimens of the beautiful women and gallant men of a state whose history brings a gorgeous chaplet to eloquence, song, and heroism. Gentlemen, the wise utilize all things possible—life, lightning, and liberty we have made conspicuous elements of hygiene, prophylaxis, and therapeutics. Let us make useful, in the future, memories awakened by our surroundings. We are on the magic land of Daniel Boone, Henry Clay, and Ephraim McDowell. What traits of character bear these honorable names to the heavens, and gild them with so divine a light! Will, indomitable, and courage that dared all things. The paths of the immortal trio all meet here. Let us light our torches at their altars and emulate their virtues. Let us will what is right, and dare to do what it indicates.

*"Gentlemen, we now stand adjourned to meet again in Philadelphia the first Tuesday in June, 1876."*

The meeting was one of the largest yet held, and it was marked throughout by good feeling. Not an incident occurred, from the beginning to the close, to disturb its harmony. The wise provision by which all questions relating to ethics or the admission of members is referred to a judicial council not only saves much time, but cuts off a vast amount of unprofitable if not angry discussion. This council—embracing as it does many of the most experienced, able, and influential members of the association—carries with it in its decisions a force of authority which settles nearly every question beyond the chance of an appeal. Its labors are immense; but, being performed by a few, the association is

left free to go on with the consideration of subjects strictly professional. This more-enduring work is done in the sections, and in the meetings of these the main interest of the association now centers. The papers read before the sections and the discussions thereby elicited will appear in the volume of Transactions, and we believe will be found worthy of the association. We have not space to give the titles of the various papers read, even if we were in possession of them.

One female delegate applied for admission to a seat in the association—Miss Georgia C. Glenn, of Ohio—but was refused by the Committee on Credentials. It is reported that Dr. Mary Walker had purposed making application for membership; but learning that her request would meet with opposition, she is said to have shaken off the dust of her feet against the learned body.

The social aspect of the association was very pleasing. A writer in the *Courier-Journal* remarks, "A more affable, good-natured, and really jovial assemblage in their personal intercourse could hardly have been brought together. It seemed to be a national reunion of very particular friends, all delighted to see one another. Of late years Louisville has entertained many conventions—religious, political, agricultural, scientific, and otherwise—yet none have shown such an array of positively good-looking and well-conditioned gentlemen. Seated in the hall, they form a very decorous, attentive, and appreciative body; their manner of conducting the proceedings being characterized by a deliberation and tip-toe method that is a natural sequence of their professional calling."

Referring to the receptions given to the members of the association, the same writer says, "The visiting doctors were the lions of the hour, and hospitality taxed itself to the utmost to do them honor and to show them the most distinguished consideration. The beauty of Louisville shone in all its radiant enchantment at the different houses, and the

invited guests vied with the hosts in welcoming and entertaining the strangers."

The meeting of the association at Louisville was one that tended to exalt the profession of medicine in the estimation of all classes of her citizens. Its members carry away with them the respect and best wishes of her people as well as of her physicians.

The following is the address of Dr. Bowling:

It is eminently proper that we should publicly acknowledge our profound thankfulness to the Great Giver for permission to see each other again in the flesh, and under his beneficent guidance to go forward with the work assigned this organized gathering of brethren; an organization of earnest representative professionals, whose fields of labor extend from ocean to ocean and from the lakes to the gulf, an area of almost inconceivable extent, recognizing every climate and capable of almost all the productions of the earth; so that should a ripple here and there mark the surface of our proceedings, let the astonishment it awakens be that it was not a wave instead. The seaboard, with its vast commercial marts, wealth, and concomitant refinement, has its delegates here; the inland sea, whose borders are just becoming instinct with human life, and whose peoples have widened the area of possibilities, with cities seemingly the creations of fancy rather than mammoth realities, is represented; the dwellers amid the Appalachian hills and in the cañons of the Sierra Nevada have here their professional aspect represented; and that plain on which their waters are shed, so vast that an attempt at mental measurement confuses the imagination and bewilders thought, has its great workers here.

A national association of medical men was without precedent when this was ushered into existence by the genius of one man, watered by his parental solicitude, and sustained by the co-operation of his brethren; all stimulated by a common hope that good must come of it in cementing the brotherhood in unity of purpose and intensifying its power for the achievement of good to the profession, and consequently to the public at large. Thus organized, and freighted with the hopes and blessings of every loyal medical heart in the country, it has literally drifted through a generation. Composed of the representatives of wide-spread and independent medical masses, with many-sided hopes and aspirations, many with a

freedom of thought and expression peculiar to their latitudes, it has seemed in turn to delight in representing every shade of medical politics. But it still lived, and every year its ancient friends met with new representatives in council, and, renewing their allegiance, lighted again their torches at its altar. The contributions of old and new were printed, and in a bound book sanctified to posterity.

It is good occasionally to recall the grand objects its founders hoped to achieve through its instrumentality. They were: 1. To give emphatic expression to the views and aims of the medical profession in this country; 2. To supply more effectual means than have hitherto been available here for cultivating and advancing medical knowledge; 3. To elevate the standard of medical education; 4. To promote the usefulness, honor, and interest of the medical profession; 5. To enlighten and direct public opinion in regard to the duties, responsibilities, and requirements of medical men; 6. To excite and encourage emulation and concert of action in the profession; 7. To facilitate and foster friendly intercourse between medical men; 8. To take cognizance of the common interest of the medical profession in every part of the United States. Organized for the achievement of eight distinct purposes, which in the aggregate, if accomplished, were to confer upon the profession of medicine in America a glory which the ages had not vouchsafed to it in any country under heaven.

It must be right that the memories of the older members of the association should be refreshed by occasional recurrence to the grand objects contemplated in the beginning, and that members of more recent date might have definitely set before them to what ends their labors were to be consecrated. With this view the occasion would invite allusions to these various objects; and

1. "To give emphatic expression to the views and aims of the medical profession in this country." These views and aims, in all their breadth and depth, twenty-five meetings of this body have emphasized in an unmistakable manner; nor were the aims and views of any body of men known to history ever stamped with a higher honor or a design more unselfish or exalted.

2. "To supply more efficient means than have hitherto been available here for cultivating and advancing medical knowledge." To show that this has been accomplished we need only point to the splendid library, rich in every department of medicine, of which this organization is at once author and publisher; a library that

will be the wonder of coming ages, recording and preserving the precious thoughts of original American medical writers, who, many of them, but for this encouragement had hardly committed them to paper.

3. "To elevate the standard of medical education." To this what can we say—what shall we say? Reports upon this subject by committees regularly appointed are among the most eloquent and philosophical papers of the transactions of this body. Never did the great and faithful of any calling lavish a greater expenditure of logic, illuminated with genius and learning, to secure its recognition among the noble as worthy of their sympathy and support than have those to whom the duty was assigned by this body to devise the best means to elevate the standard of medical education. The desire for its accomplishment seemed to be felt by all, but how it was to be achieved was apparent to none. Not unlike the efforts of the alchemist, the very failure inspired new struggles, the greater the obstructions the more potential the forces invoked to remove them. The association deserved success. The schools were the janitors at the portals of the professional temple, and their competition and rivalry to secure numbers measured the standard of medical education. Then sprung up the antagonism between the schools and the association, which ran through a period of seventeen years. As the efforts of the alchemists were not lost, though the myth of philosophy eluded their grasp, so also the association triumphed in what was considered a defeat.

Our chivalric fathers abhorred the standard of rebellion, and urged upon king and people with an eloquence which for pathos and sublimity is without parallel in English literature, beseeching only the recognition upon the part of the ministry of the rights and privileges of British subjects. For a maintenance of these a war was forced upon them that ended in converting a British subject into an American freeman. Our English ancestors, from disputes about privilege and prerogative, flew to arms to establish the equipoise, which ended in the overthrow of the one and an unhealthy augmentation of the other; failed in the establishment of a republic, but broke forever the backbone of insolent prerogative. A clash of ideas in France ended in an appeal to arms. The king was the state. The revolution of 1789 ensued, since which, amid innumerable changes, there has been none that does not make haste to declare that the people are the state! This great good,

not struggled for, Providence has secured to the French, who had vainly maddened through blood for the achievement of almost every thing else. Short-sighted man has thus overruled for his good his most heroic efforts in an opposite direction. In our own short history as a country, within the recollection of us all, stupendous sacrifices solved a problem undreamed of by those who precipitated them, and the history of mankind is luminous with similar examples; and those among us conversant with it are neither surprised nor disappointed that this organization, in all the years it has met and resolved and reported, finds itself as far as ever from the achievement of that desideratum adumbrated by its initial convention as the chief end of its creation.

The colleges, borrowing a word from the politicians and recognizing the association as national, opposed through their accredited organs any centralizing tendency. Medical schools multiplied, and while each adopted the Code of Ethics suggested by the association and was proud of being represented in it, was unwilling to concede to it any power over its local affairs, and thus for a quarter of a century they seemed antagonizing forces. The natural rivalry of the schools would suggest the power of the association to aid ends honorably labored for, which would as naturally stimulate opposition. If one school sought to strengthen itself and augment its classes by obedience to the behests of the association, its rival was as certain to oppose change as evidence of decay, and thus strengthen itself by a recognition of the landmarks of the fathers, and a determination to deepen their footprints by walking in them.

Meanwhile the association, in vibrating now toward one and anon to the other of these extremes, seemed attempting that difficult equestrian feat of riding at the same time horses running in opposite directions. The schools, while denying the authority of this body to prevent them doing as they pleased, were not indisposed to invoke its countenance in favor of any peculiarity to which any of them committed themselves. While its transactions therefore exhibit it as a gallant ship struggling to make headway when directly opposed to the wind, with its prow during the effort turned to every point of the compass, yet the skillful navigator knew notwithstanding that she was edging up slowly but certainly in the right direction; and the belief of this truth has sustained its friends from the beginning and secured their cheerful attendance, when the less observing could see no future from which the clouds



did not shut out the light of heaven. Such did not stop to consider how vast was the country here represented, and how widely different the outward circumstances of the men that constituted the association at any one meeting; one from a western wilderness, who, like Fanny Fern's father-in-law, would have to ride through the rain six miles, along a bridle-way, of a dreary December night, and pull a tooth for twenty-five cents, sitting beside a "brother" whose knife took to blood at a hundred dollars a drink a long time ago, and now wants more, and who visits his patients on silken cushions, housed in his two-horse *coupe*, along thoroughfares as smooth as a marble-top table. No representative body on earth is composed of men who, while all good and true, yet like this presents to the outward world aspects so diversified, so unlike, so seemingly opposite. To secure an *esprit de corps* among such representatives requires more than a year, more than a decade, more than a generation. The country which they represent is yet in its infancy, and its population, like its language, after a good Anglo-Saxon foundation, is mixed in its composition with the representatives of all the countries under heaven, and a blending, fusion, and consolidation of their descendants into that homogeneous nationality adumbrated by its motto—"out of many, one"—must occur before its higher civilization can avow itself American.

A departed member of this body has eloquently shown how that process has been going forward, in what he delights to call the Great Interior Basin of North America, from the beginning, and which must be completed before we can present a national type which shall distinguish the North American as the Spaniard or the Frenchman is distinguished. The diversity which characterizes a community in general must apply equally to any special calling, as its preachers, its lawyers, and its doctors. History reveals to us the tenacity of traditions, and that many succeeding generations rise, flourish, and go down to the tomb unable to resist them, while not in words acknowledging their teachings. Communities thus compounded will find the same want of harmony among those they consecrate to special professional life as exists among themselves.

We offer this apology for any absence of persisting effort in one direction that may be chargeable to this body, composed as it is, after its permanent members, by representatives annually chosen, and the bulk in attendance living nearest the place of meeting.



These things considered and allowed, our meetings have been as harmonious as could be reasonably expected. Still to return to the ship, that universal metaphor, the ocean it navigates knew rather more of storm than calm, and thinking men cast about for some Jonah on board who, pitched into the surging sea, might prove as oil to its troubled waters.

At Nashville, eighteen years ago, amid a storm of school representatives in this association, a resolution was introduced to so change our constitution as to keep the representatives of schools and hospitals as such out of this body. Under the rule it must wait a year for consideration. It was called up the next year at Washington, after great excitement about hospital representatives, and was lost by almost a unanimous vote. In 1869, at New Orleans, the same proposition was made. A greater storm at the meeting in Washington, in 1870, from school representatives caused deeper thought upon the subject; and at Detroit last year, seventeen years after the Nashville resolution, to the unspeakable joy of many, the constitution was so amended as to give a permanent quietus to this disturbing element and assurance of a calmer future.

As in the structure of our national constitution concessions were necessary to secure its adoption, which insured subsequent disaster, only second in importance to its defeat—yet as that defeat was to insure the overthrow of the temple of liberty then being erected, the most exalted patriotism did not hesitate, hoping that a little time would so consolidate its elements as to make it irresistible to any assault invoked by the very weaknesses necessary to secure its existence—so with our organization. But for the important concessions made to schools and hospitals in the beginning it might never have existed; yet life being thus infused into it, each succeeding year contributed to its unity and power, strengthening it against the destructive tendency of an inherent constitutional defect, and finally enabling it to rid itself of it forever.

Other changes of less importance have from time to time lent their aid toward securing for our society as much of finish and beauty as are compatible with the imperfection of the human understanding. By the aid of committees all disturbing influences such as once convulsed the assembly are quietly disposed of, and a stranger present during hours of business would regard it as equal in dignity and decorum to any representative body in the world. Though a little late perhaps in arriving at the full proportion and stature

of manhood, the induration of its ligaments, fusion, and condensation of parts, with general unity and individuality, are doubtless the more perfect, and in consequence giving earnest of prolonged youth and an old age that shall know no decay. As of man so with his works; from the beginning of his life to manhood his entire existence revolves around himself. He may afterward bless his kind with new creations or discoveries, become a Moses or a Washington. All the past years of the existence of the association were necessary for its own development, for its crystallization, the hardening of its shell, and elaboration of its organs—all this for itself. It may now look abroad for the accomplishment of ends worthy of so prolonged an apprenticeship. Can it now, in the glory of its early manhood, take any profitable step toward the greatest end indicated by its fathers, and thus accomplish all the objects of its creation; or shall it, after all the waiting in hope all these years for its maturity, concede that its creation was a mistake and its existence a failure?

If then this body has not of itself accomplished all its friends hoped for in the beginning in elevating the standard of medical education, they must be satisfied to know that that standard notwithstanding has been regularly going up, fully abreast with the progress of our new country in every other department of human learning, and all the arts and appliances of a rapidly-developing civilization. The spring can only well up the waters sent to it, purifying them in the process, and the sea is but the representative of many waters. The schools must take such material as they can get, and make the most of it; and the American Medical Association, as in the past so now and hereafter, is obliged to consist of such representative medical men as the schools may prepare and fashion for its use. The stream can not rise higher than its source. A vast area, with a thin-spread population, "few and far between," may only boast of a log-cabin school-house, so remote from the scattered homes of many that a far-away boy is indebted to his pony for ability to reach it. He learns to read, and thus possesses himself of a magic key to store-houses "undreamed of in his philosophy," but his wildest reverie never sketched the shadowy outline of a college of any kind. Natural bone-setters and seventh sons may be blessings in an emergency, but the urgent medical wants of any community soon reach immeasurably beyond their ability, and the pony boy, who "reads like a book," is proud to

see his parents besieged by their neighbors to make a doctor of him. A copy of Thomas's *Blunderbuss*, redeemed from kindred loft-rubbish, is procured for him, and he goes into it with all his might, and from the beginning of January to the end of September he reads it through six several times, from contents to index inclusive. He gets an idea of a medical college from this book, and after a consultation with the blacksmith writes pretty much at random to the president of a medical college of some distant city, where he imagines there ought to be such a contrivance of human ingenuity to help young gentlemen engaged in prosecuting their studies under difficulty. He is soon startled and surprised with a kind reply and a "catalogue" thrown in. Kith and kin are laid under contribution to raise the required sum, the whole neighborhood is astir in lending a helping-hand, and at the end of a week our hero, with huge saddle-bags, is astride his ever-faithful pony, with blessings like a storm of snow-flakes bringing up the rear, on a journey of a thousand miles, many hundreds of which are threaded by a bridle-way through a wilderness. The old folks at home are full of the event, and the distant settlers receive and dispense the intelligence to those still more remote.

At college he works like a Trojan. At the end of the session he returns to his forest-home, and his text-books, a pocket-case of instruments, and a hundred medicines in gold-leaf-labeled jars and bottles follow him. An office of poles and cat and clay awaits him in the corner of his father's yard. He is a marvel and a wonder to all that country, and jumps into an overwhelming practice. His people are happy in him, and he is happy in his people. Who would disturb these relations if he could, and who could if he would? When that country is developed with roads and wealth and refinement its medical men to the manner born will be like it, as their predecessors were generations before like it then.

Learning and genius are lost upon semi-barbarians and recoil instinctively from their habitants. You may resolve as much as you please, after eloquent and interminable whereases, and in the future, as in the past, multiply reports that it ought not to be so, but the fact will still stare you in the face that it is so.

That the schools are all that their hopeful, faithful, and earnest teachers can make them, and that they accomplish all that is possible with the material intrusted to them, none ought to doubt;

and that the country at large selects as good material as it possesses for the schools is equally indisputable. Nor should any believe that the youth selected for medical schools are, in respect of preparatory education, a whit inferior to those selected for the law or divinity.

The question returns to us, What can the association now do in its early manhood honestly toward redeeming implied pledges in its infancy? Much, if it have nerve or backbone; nothing, if this be absent. The plan is simple, as all plans are that succeed. Logic and truth are simple, but without nerve the whole moral world is like an empty sack, utterly incapable of standing erect. The barrier to success has been removed by the abolition of school representation as such, and reducing the whole body to "lay" members. It was to secure the success of the plan to be proposed to elevate the standard of medical education that the resolution was introduced at Nashville, in 1857, to remove the schools from the association.

In the arbitrary numbering of the objects for the promotion of which this body was created, that of No. 8 is declared to be "To take cognizance of the common interest of the medical profession in every part of the United States." A very comprehensive power, assumed in the beginning, and never denied in all these years, will not be questioned now, when the moral frown of the association would be fatal to whoever or whatever connected with medicine should oppose the grand and benevolent objects that lie at its foundation. In taking cognizance of the common interest of the medical profession in every part of the United States it must go back upon itself, and acknowledge its recreancy to the high objects of the fathers, who wore away their lives in an unswerving devotion to it, not to exercise the sum total of its legal and moral force in securing a higher standard of medical education in this country than existed at the time of its inauguration.

Therefore let it be solemnly resolved by this meeting that it shall be regarded as derogatory to the character of any physician in any part of the United States to take under his care as a student of medicine any one who can not exhibit evidence of having taken a degree in a regularly-chartered college, or a certificate of qualifications necessary to become a student of medicine from a board of examiners appointed for that purpose by the American Medical Association. This will do the work.

Territories and new states in a country like ours, in a formative state, will provide themselves with medical helps in the mode we have described, which, existing outside of this body and independent of it, will occasion it no concern whatever. Nor would the schools suffer pecuniary loss under this rule. When it was generally known, as it soon would be, young men desiring to enter the profession would earnestly devote themselves to the duties of preparation, nor relax their efforts till possessed of the degree or the certificate.

Again, many educated young men under this rule would turn their attention to medicine, whose votaries were to consist of their peers, who under the existing rule would not risk its leveling influences. Let the doctorate imply something more than "two full courses of lectures, the last of which in this institution." Besides, it would give the college an ample excuse for not receiving every uneducated, lazy dolt who desired to make a living under false pretenses.

There is nothing really binding in the rule suggested. The only power in the matter is the great moral weight of the association. It enacts nothing, but simply asserts what every member of it knows to be right. After a few years such a certificate of the examining board or evidence of a college degree might be declared necessary in order to enable an applicant for membership in this body to secure admission; for surely it is the common privilege of all organizations to judge of the qualifications of their own members. Then will the certificate of membership here pass the holder any where as a gentleman and scholar.

It is precisely in this way that the medical department of the army and navy is purified. The adoption of this addition to the Code of Ethics would furnish medical gentlemen an excuse for getting rid of applicants for office-study whose preliminary education they know to be defective, and whose relations they would dislike to offend by saying so.

Neither would this rule exclude any one from being a doctor. In a vigorous republic there will always spring up men who by genius and long self-training literally hew their way to greatness in all of the professions, while many more will pass through colleges, winning all their honors, to shrink into insignificance and pass through the world unknowing and unknown. For the former heaven has made ample provisions and stamped them as the no-

bility of nature, whom this body can neither depress nor elevate—nay, nor could an association of angels.

Under the old plan, as under the new, the schools must furnish the association with delegates; but under the new the delegate was passed upon and accepted before he was medically born. In this latter case the association begins *de novo*, with the beginning. It is present at both ends of the line. In the former case it proposed to arrange the plumage of another party's chicken, to groom the steed of another. The proposition was arrogant, and excited opposition and clamor. The chicken was from the prairie and the steed from the desert, captured by the schools, were theirs, and they naturally threw about them the ægis of protection. Examining boards, after two courses of lectures, were boards born out of time, and their tender mercy to the callow brood was not to be trusted, and the preposterous suggestion was scouted. The new plan is a medical sandwich. The schools are a slice of ham between an upper and lower layer of association bread. It must be clear to every thinking mind that the plan, while eminently just and proper, places medical education in the United States where it ought to be, with every thing else pertaining to the profession, in the power of the American Medical Association. Medical education *per se* will take care of itself, the emulation of the schools being altogether sufficient for the maintenance of its great interest. It is the preliminary education of those who would enter the profession that must be looked to. It must be every where known that no medical college nor any other contrivance short of the fiat of the Almighty can make a physician out of an uneducated man; that medicine is the cap-sheaf of all knowledge, and the belief that prevails that it can exist in the absence of its legitimate supports is only equaled by that which "materializes" the spirits of the departed before the resurrection.

God opened the Red Sea to the leader who was skilled in all the learning of the most learned people in existence; the greatest body of water is the lowest; and the foundation of the redemption of the world was confided to the lowly; still when the glad tidings were to be carried to the learned nations a profound logician and a philosopher received the appointment, and all, and therefore the greatest, of theological upheavals that have since convulsed the world trace their origin to brains of the most elaborate culture. The god-like Clay, in his speech to his old neighbors upon retiring



from the Senate of the United States, among the obstructions in the path of his early life, alludes feelingly to his "imperfect education." Drake, on whose triumphant theater we are, and whose mighty spirit hovers about it like the aroma of the broken vase, would not go to Europe in his old age, being ashamed of his want of knowledge; and he whose great soul conceived and planned this organization, and whose eloquent pleadings have held it to its moorings, amid storm and sunshine, through a generation, in a heroic struggle to secure a higher educational plane for his beloved profession, declared that a defective early training had met and abashed him at every turn in his professional life.

While it is a duty we owe to a common brotherhood to sustain every member of it, yet those not born into it can not complain of our action, they having nothing at stake in our profession, while its votaries leave them the whole world besides as scope and verge enough for the exercise of their genius.

The attempt to communicate to this body *per se* information upon a subject in regard to which one member knows as much as another would be to manifest a pitiable degree of idiocy; but the circumstances not only justify but demand allusion here to whatever ought to reach the public at large, stamped with the authority of the association, which could in its own language "promote the usefulness, honor, and interests of the profession, and enlighten and direct public opinion in regard to the duties, responsibilities, and requirements of medical men.

During the past year a "scientist," whatever that means, having the supervision of a department of a widely-circulated political newspaper, published therein that the medical profession had not advanced a step in seventy years; and this cry from many quarters, so prolonged and persisting, has established a popular belief. "To enlighten and direct public opinion," it is proper to state that a member of this body, our late lamented lexicographer, among the chiefs of learning and industry in his generation, and alike an ornament to his profession and to human nature, "to meet," as he writes, "the progress of medical science," in the sixth and seventh editions of his dictionary, added nine thousand terms and subjects; and in the eighth edition, twenty years ago, the same progress required four thousand more terms and subjects; and the edition of 1865, to the same end, required sixty-five pages of new terms and subjects. That a profession, stationary or in an active



retrograde movement from some fancied height, should require all these new terms and subjects during its decline is simply ridiculous; and those among us who believe this, and who have aided in fixing this belief upon the public, have for the time but yielded to the flattering and seductive influences of a generous imagination.

Old politicians, being crowded out, very naturally conclude that the new ones are but imitating Phæton's drive to destruction, and that the country under their guidance must inevitably go to pieces. Old men always have their lines cast in degenerate times, and the only consolation remaining to them is the reflection that their degenerate days will be the grand old time of patriotism, honor, and manhood of their descendants. One needs no better authority than all the editions of Dunglison's dictionary to assure him that during all this century particularly the progress of medicine in all the countries of civilization has been onward—right on—receiving not the slightest check from internal commotions or outward pressure; but, like the tread of a mammoth, literally crushing out whatever accident or design placed upon its pathway.

That our own country has during this period contributed as much to this development as any other no unprejudiced observer will dispute. During the last generation especially it has figured conspicuously on the frontier of medical progress; and that this association has accelerated the movement is equally beyond controversy. As the iron-shod steed speeding along the night-shrouded turnpike illumines his way by the fire his own progress strikes from the resisting rocks, so this body, in doubt and darkness, often when scorners smited and good friends hesitated caught fire from the very friction of opposing circumstances, and emerged self-glorified on its march to triumph.

Gentlemen, western medicine for a long time established its Mecca at the falls of the Ohio. Whatever the fashioners of taste may determine, the medical heart can not go far astray in recalling the Titans that officiated at its altars. Many of them "sleep well after life's fitful fever," but the rock-girt and rock-floored river in the neighborhood of their ashes, as it throws its disturbed waters over the cascade, will chant their requiem while grass grows or water runs. One,\* in a green old age, whose fame has filled the world, stands, like the statue of a demigod poised on the apex of his monumental shaft, far above all surrounding things, pointing

\* S. D. Gross.

to an earlier day-star than greets the vision of ordinary mortality. Another,\* happy in the memories of a well-spent life, the charming grace of whose cultured pen has left an imperishable record, lingers in the peaceful enjoyment of that subdued and enchanting twilight of life, between sundown and the "deeper gloaming," so in harmony with the spirit of the good, and, having thrown his mantle on other shoulders, patiently awaits the "translation." One,† the Galen now of the great city of the republic, garners the golden sheaves of a crop sown long ago and thoroughly cultivated. Another,‡ the American Dupuytren, on the fringe of the sunny land of the orange and the magnolia, with the premonitions of a glorious sunset gathering about him, in faith and hope, is also ready. We know that their example is not lost on those who have taken their places in the flourishing medical institutions of this noble city, a city whose munificence to medicine has entitled it forever to the kindest memories of the profession.

KENTUCKY STATE MEDICAL SOCIETY.—The report of the proceedings of our State Medical Society was unavoidably crowded out of our last number. The society met at Henderson on the 6th of April, and in some respects the meeting was the most interesting ever held. Nowhere was the society ever before so cordially received or so hospitably and elegantly entertained by the citizens. We accepted this as an expression of the high esteem in which the medical profession is held by that refined community, the medical men of which have presented to them as worthy examples as are any where to be found of the cultivated, benevolent, high-toned physician. The meeting at Henderson will be reverted to by all the members who had the good fortune to attend it as a spot of azure in a clouded sky, or as a palm-clad island encountered in the midst of a troubled sea.

The address of the president, Dr. Baker, abounded in sound thoughts and wise and pertinent suggestions happily expressed. We are not sure how one idea advanced in it will be received. The president condemned the practice of

\* L. P. Yandell.

† Austin Flint.

‡ P. F. Eve.

indiscriminate charity to ministers of the gospel—to putting all alike, as he expressed it, on the list of paupers. Preachers who receive competent salaries, he thinks, ought to pay their doctors like other people.

Papers were read before the society by Dr. W. H. Long, of Louisville, Dr. J. Hale, of Owensboro, Dr. R. F. Logan, of Shelbyville, Dr. W. E. Ryon, of Simpsonville, Dr. J. P. Thomas, of Christian County, Dr. J. L. Cook, of Henderson, and by Drs. Reynolds, R. Brandeis, Fenner, T. J. Griffiths, Holloway, D. W. Yandell, and L. P. Yandell, of Louisville.

The officers of the society elected were Dr. J. A. Hodge, president; Drs. Turner Anderson and O. Newland, vice-presidents; Dr. J. W. Singleton, recording secretary; Dr. J. A. Larrabee, treasurer; and Dr. J. J. Speed, librarian.

The society adjourned, after a session of two industrious days, to meet on the first Tuesday in April, 1876, at Hopkinsville.

We regret to have to state, as we do on the authority of the treasurer, that unless delinquent members come forward promptly with their arrearages the volume of Transactions issued by the Committee of Publication this year will necessarily be a very meager one. Much work was laid out to be done by committees before the next meeting.







